THE EFFECTIVENESS OF USING TOTAL PHYSICAL RESPONSE TO TEACH VOCABULARY VIEWED FROM THE STUDENT’S LEARNING INTEREST

(An Experimental Study at the Fourth Grade Student’s of SDN 1 Tegaldowo in the Academic Year of 2011/2012)

A Thesis

Submitted as a Final Fulfillment of the Requirement for getting the master Degree of Education in English

by:
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ABSTRACT

Andhina Ika Sunardi. S891008002: "THE EFFECTIVENESS OF USING TOTAL PHYSICAL RESPONSE TO TEACH VOCABULARY VIEWED FROM THE STUDENT'S LEARNING INTEREST (An Experimental Study at the fourth Grade Student's of SDN 1 Tegaldowo in the Academic Year of 2011/2012)”, English Education Department, Graduate Program, Sebelas Maret University, Surakarta 2012.

The objectives of the research are: (1) to identify whether Total Physical Response is more effective than Grammar translation to teach vocabulary; (2) to identify whether the students having high Learning Interest have better vocabulary mastery than those having low learning interest; and (3) to prove whether there is any interaction between teaching methods and learning interest to teach vocabulary.

The research was conducted at SDN 1 Tegaldowo in the academic year of 2011/2012. The population in this research was the fourth grade of SDN 1 Tegaldowo. The total number of population was 48 students coming from two classes. The sampling of the research was total sampling. It was because the population was less than 100 students. In other words, the population was the sample. The samples were IVB as the experimental group and IVA as the control group and each consists of 24 students. Then, the techniques which were used to collect the data were questionnaire and vocabulary test. The instruments were tested in the try out to check the questionnaire validity and reliability, and vocabulary test readability. After the treatment was applied for eight meetings, a post test was conducted to obtain vocabulary performance scores. Then, descriptive and inferential data analysis were conducted to give description of the data and to test the hypotheses. The normality and homogeneity were tested before the data were analyzed using ANOVA with .95 level of significance and Tuckey.

Based on the results of the analysis, there are some research findings that can be taken: (1) TPR is more effective than GTM for teaching vocabulary; (2) The students having high learning interest have better vocabulary mastery than the students having low learning interest; and (3) There is an interaction between methods and students’ learning interest for teaching vocabulary. TPR is suitable for students having high learning interest and GTM is suitable for students having low learning interest.

From the results above, it can be concluded that TPR is an effective method to teach vocabulary for the fourth grade students and this research implies that methods have a strong influence on students’ vocabulary mastery. In order to get maximum result and effect on students’ vocabulary mastery, the writer suggests English teachers to apply Total Physical Response by considering students’ psychological aspects especially their learning interest.
PRONOUNCEMENT

This is to certify that I myself write this thesis entitled: the Effectiveness of using Total Physical Response to teach vocabulary viewed from Student’s Learning Interest (An Experimental Study at the Fourth grade Student’s of SDN 1 Tegaldowo in the Academic year of 2011/2012). It is not plagiarism or made by others. Anything related to others’ work is written in quotation, the source of which is listed on the bibliography. If then this pronouncement proves incorrect, I am ready to accept any academic punishment, including the withdrawal or cancellation of my academic degree.

Surakarta, Juli 2012

Andhina Ika Sunardi

S891008002
MOTTO

"No success without struggle"
(Andhina Ika Sunardi)

MAN JADDA WAJADA
(Siapa yang bersungguh-sungguh, akan berhasil)
DEDICATION

With deep profound love, this research is devoted to:

Her beloved father and mother, thank you. Nothing compared to what they have done for her.

Her beloved “mbah putri” and sisters “dek tha-tha”, who always pray and encourage her.
ACKNOWLEDGEMENT

Alhamdulillahirabbil’alamin. Praise be to ALLAH SWT who has given His blessing to the writer so that she can complete the writing of this thesis as a partial requirement for achieving the graduate degree of education in English Education Department, Graduate Program of Sebelas Maret University.

The writer is also fully aware that her thesis can never be finished without the help of others during the process of writing. Therefore, in this occasion she would like to express her deepest gratitude and appreciation to the following:

1. The Director of Graduate Program of Sebelas Maret University who had given his permission to write this thesis.
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5. The Headmaster of SDN 1 Tegaldowo, for the permission and advices for doing the research in SDN 1 Tegaldowo.
6. The Sixth year students of SDN 1 Tegaldowo who participated well in the research.
7. Her beloved family, her father, her mother, her grandmother, her sister, for their supports, caring, and prayer.

The researcher realizes that this thesis is still far from being perfect. She hopes and accepts gratefully every comment and suggestion. Hopefully, this thesis will be useful for the readers.

Surakarta, Juni, 2012

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CHAPTER I

INTRODUCTION

A. Background of the Study

Language has very important role in human life. Most people in the world learn it. In social life, people who want to survive and to be involved in their society must have skills in using language. By the skill, they can state their ideas, purposes, feelings, and thought to communicate with others.

English is an international language. English has been taught in Indonesia. English is important for the absorption and development of the knowledge, technology, and culture and for building relationship with other countries. English becomes one of disciplines taught in schools. It is taught from elementary school or even from kindergarten until university. Learning English needs a process that takes a long period of time because we do not know about English before.

English is taught in elementary school because of perception that young learners learn language better than the older. It is expected that they will get used of English. In elementary school, English is taught from the very basic one. It is started by introducing vocabularies. As an important aspect in a language, vocabulary has essential role in learning English. Nunan (1999: 103) stated that if one has an extensive vocabulary, it is possible to obtain meaning from spoken and written texts, even though one does not know the grammatical structures in which the texts are encoded. Moreover, the vocabulary mastery has strong relation in the
process of developing the four skills of English (Listening, Speaking, Reading, and Writing).

In learning English, there are four skills that are emphasized. They are listening, speaking, reading, and writing. The skills developments are supported by some elements such as: grammar, structure, vocabulary, and pronunciation. Vocabulary is one element that has a large influence to improve English. Coady and Huckin (1998: 5) say that vocabulary is the central to language and of critical importance to language learning for the young learners. Vocabulary supports all of the English skills. Therefore, having the skill of vocabulary is important to get the key of mastering English as a whole. Therefore, vocabulary is one of language elements that is very important to develop the four skills.

Teaching English in elementary students is not the same as teaching English in junior or senior high schools. Elementary students especially the fourth graders find difficulties in understanding and comprehending the material, especially in learning vocabulary because they do not know about English before. Moreover, they are still in the process of getting their native language. According to Brewster and friends (2002: 81) teaching English vocabulary to children who are still building their L1 vocabulary and are still in the process of acquiring and organizing concept makes the learning of vocabulary in foreign language a complex matter.

Some students have less motivation to learn English. They think that English is very difficult and they feel shy to speak English, and frightened to make mistakes. These kinds of views give them pressure in learning English and
drive them into stress so the achievement is low and the purpose of learning is still unsuccessful. According to Richards and Rodgers (2001:75) an important condition for successful language learning is the absence of stress.

The low desire of children to learn is a heavy problem that needs a good way to solve and the teachers are demanded to be good and active. They should create an interesting classroom atmosphere and put a particular effort on more fully preparing materials and activities to introduce vocabulary, not only give the materials or keep explaining it in front of the class without considering the children’s characteristics and needs, but some teachers still have not realized it yet.

In fact, many students in SDN 1 Tegaldowo especially fourth grade students have difficulties in vocabulary mastery. Most of the materials in fourth grade is new vocabulary in texts so the students are insisted to translate the text if they want to know and understand the meaning and message of these texts. Sometimes, they know the meaning of the words or vocabularies but they don’t know how to make a good translation. Moreover, some students don’t know the meaning of the words and can’t get the message from the text at all. It can be known from the daily activities in the class. The result of the test is still low and satisfying.

Some factors have influenced in teaching vocabulary. The creative teacher will use teaching method which is appropriate with the students’ condition in the class and can attract them to be more interested in learning English especially vocabulary mastery. There are many teaching methods that can be applied in
teaching vocabulary. One of them is Total Physical Response. TPR is a language learning method based on the coordination of speaks and action. When the teacher teaches this method by using the activity of speaking, the teacher trains the students to develop their ability in spelling and pronouncing. Whereas the activity of action can develop students ability in comprehending the meaning of vocabulary and using it a proper situation. It may help them to know the meaning of the new words easily, able to pronounce the words correctly, to spell, and to use the new words in sentences.

In fact, many teachers still feel comfortable to use “Grammar Translation Method” to teach vocabulary in their English class. Fauziati (2002: 11) states that Grammar Translation Method in teaching vocabulary is too much emphasizing the learning of grammar than learning to use the language. This method neither approaches nor encourages the students’ communicative competence. Grammar Translation Method may make the language learning experience uninspiring and boring. The students will not be interested in paying attention to the teacher’s explanation because they will feel bored quickly.

Another factor which influences the students vocabulary mastery is interest. Deboer (1966: 131) states that background experience, interest, and native intelligence may also play a part in determining how many and which individual words a reader may miss and still have high comprehension. It can be concluded that interest has a crucial role for improving students’ vocabulary mastery.
The researcher uses Total Physical Response to teach vocabulary to the fourth grade students of SDN 1 Tegaldowo in order to improve the students’ vocabulary mastery and make them more interested in learning English especially vocabulary. She also considers the students’ interest, whether low interest or high interest as a tool for knowing whether Total Physical Response is suitable for the students who have high interest or low interest and to know whether Grammar Translation method is suitable for the students who have high interest or low interest.

Based on the explanation above, the researcher is interested in conducting an experimental research entitled “The Effectiveness of Using Total Physical Response to teach Vocabulary Viewed from the Student’s Learning Interest”.

B. Problem Identification

Based on the background of the study above, the researcher identifies some problems as follows:

1. Why do the students have difficulties in mastering vocabulary?
2. What factors cause low mastery of vocabulary?
3. Is Total Physical Response effective to teach vocabulary?
4. Does the students’ interest influence their vocabulary mastery?
5. Is there an interaction between teaching methods and interest to teach vocabulary?
C. Problem Limitation

The researcher realizes that it is impossible to investigate all identified problems above. Thus, the problems of this study are limited to certain variables. In this matter, the researcher emphasizes the problems of the research on Total Physical Response Method which is as an experimental and Grammar Grammar translation Method which is as a control variable. Then, the teaching vocabulary is focused on the materials of the fourth grade students of SDN 1 Tegaldowo in the academic year of 2011/2012. Meanwhile, learning interest is as an attribute variable because this variable is believed as one factor that may affect students’ vocabulary mastery.

D. Problem Statement

This research focuses on the problems formulated as follows:

1. Is Total Physical Response more effective than Grammar Translation Method to teach vocabulary to the fourth grade students of SDN 1 Tegaldowo in the academic year of 2011/2012?

2. Do the students who have high interest have better vocabulary mastery than those who have low interest to the fourth grade students of SDN 1 tegaldowo in the academic year of 2011/2012?

3. Is there an interaction between teaching methods and learning interest to teach vocabulary to the fourth grade students of SDN 1 Tegaldowo in the academic year of 2011/2012?
E. Objective of the Study

In the line with the research problems, the objectives of the study are as follows:

1. Whether Total Physical Response is more effective than Grammar translation to teach vocabulary to the fourth grade students of SDN 1 Tegaldowo in the academic year of 2011/2012.

2. Whether the students having high Learning Interest have better vocabulary mastery than those having low learning interest to the fourth grade students of SDN 1 Tegaldowo in the academic year of 2011/2012.

3. Whether there is any interaction between teaching methods and learning interest in teaching vocabulary for the fourth grade students of SDN 1 Tegaldowo in the academic year of 2011/2012.

F. Benefit of the Study

This study is targeted to investigate the effectiveness of Total Physical Response and Grammar Translation Method in teaching vocabulary. If such analysis proves to have significant role on the level of the students’ mastery in vocabulary, the research findings are expected to provide additional references to those who are concerned with the teaching vocabulary at the elementary school.

1. To the Teacher

It is expected that the teacher will get more information about one of the appropriate teaching method, in this case, Total Physical Response. So the teacher is hoped to use an interesting teaching learning process by using this
method. Then, the data of the research are also very useful for the teacher. It will help the teacher to identify the students’ difficulties in learning vocabulary and also find the students who need more guiding. Then, the teacher can take some correct problems solving from those problems.

2. To the Students

It is expected that the result will give motivation to the students to be more creative and better in vocabulary mastery. Through Total Physical Response, students are expected to have good enrichment in vocabulary and also the changes of behavior during teaching learning process.

3. To the School

It is expected that the information of the result will be very useful for getting success in teaching learning process, so the quality of teaching learning process can be increased. The result of the research is also hoped to improve students’ achievement in English lesson.

4. To another researcher

It is expected that the result of the researcher can give more information for getting the better research. The quality of this research can increase and become useful for the development of the research.

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CHAPTER II

REVIEW OF RELATED LITERATURE AND HYPOTHESIS

A. Vocabulary Teaching for Elementary School

1. The Nature of Vocabulary

Hornby (1994: 1425) states that vocabulary is total number of words that makes up a language. Richards (2001: 4) adds that vocabulary is one of the most recognized components of language. Brown (2001: 377) views vocabulary items as a boring list of words that must be defined and memorized by the student, lexical forms are seen in their central role in contextualized and meaningful language.

There are some definitions of vocabulary proposed by linguists. Hatch and Brown (1995: 1) state that vocabulary is a list or set of words for a particular language or a list or set of words that individual speakers of a language might use. Since vocabulary is a list, the only system involved is alphabetical order in dictionaries. Here, vocabulary is written in alphabetical order in dictionaries based on system or rule of foreign language.

According to Ur (1996: 60) vocabulary can be defined roughly as the words we teach in the foreign language. However, a new item of vocabulary may be more than a single word: like “post office” which is made up of two words “post” which means place or station and “office” which means agency or organization but expresses a single idea that is “kantor pos”. It means that
every new word in foreign language taught by the teacher is used for student’s daily conversation based on the level.

From the definition above vocabulary means a new word or more which expresses the meaning or idea to construct sentences for communication. The words here are the symbols in form of group of letters representing either a physical object or an idea. It can be formed from a single or more than one word.

2. The Importance of Vocabulary

Vocabulary is an important aspect in our life because people need vocabulary in expressing their ideas both in mother tongue and foreign language. Tailor (1991: 1) says that in order to live in the world, we must name objects. Names are essential for the construction of reality. Without a name, it will be difficult to accept the existence of an object, an event, and a feeling.

Vocabulary always becomes the essential part of English as a foreign language. Every person who learns a language must learn the vocabulary of the language in order to make the learning process easier. Without vocabulary mastery, learning a language becomes a very hard thing to do and communication in second language cannot happen in any meaningful way.

In language learning, vocabulary plays an important role. Edge (1993: 27) states that knowing a lot of words in foreign language is very...
important. Cross (1995: 14) states that a good store of words is crucial for understanding and communication. A strong vocabulary can be a valuable asset, both in college and later in our career.

According to the statement above, it can be concluded that vocabulary is very important in learning language and mastering vocabulary will facilitate someone in using language in communication.

3. Aspects of Vocabulary

According to Carter and McCarthy (1988: 75), in the early stages of language learning, words are conventionally learned in lists of paired words or ‘paired associates’. The list contains a word from the target language, with synonym in that target language, or a grammar translation in the mother tongue and these can be accompanied by a picture, or some means of graphic or other mnemonic representation.

In all three cases teachers call attention to the meaning after calling attention to the English word. It is really best to draw students’ attention first to the new word, then to its meaning. It is interesting to compare this order with the order of events in learning vocabulary in one’s mother tongue. During a child’s early years, what happens first is this: the child has an experience with some object. While his attention is on the object, the child then hears the name of the object which attracts his interest. First the child’s attention is drawn to the truck, and then the child gets the word that names it.
Based on the statement above, it can be concluded that in teaching vocabulary teachers should create their need in learning language, create a sense of need for words, and show the meanings or words that can support their learning about vocabulary.

Thornbury (2002: 27) declares some factors why learning vocabulary is rather difficult for second language learner. They are: (1) pronunciation; (2) spelling; (3) length and complexity; and (4) grammar, meaning, range, connotation and idiomaticity. If those factors are fulfilled, someone can be said that he or she has achieved the vocabulary mastery. The example is when an Indonesian student has an English subject at school and it is the second language for her or him. She or he can’t understand the lesson easily because she or he should know the appropriate word, how to spell, how to pronounce, what’s the meaning, etc to express the idea of the subject. Those six factors above will be defined briefly here.

1) Pronunciation

Research shows that words that are difficult to pronounce are more difficult to learn. Potentially difficult words will typically be those that contain sounds that are unfamiliar to some groups of learners- such as regular and lorry for Japanese speakers. Many learners find that words with consonants clusters, such as strength or crisp or breakfast, are also problematic.
2) Spelling

*Sound*-spelling mismatches are likely to be the cause of errors, either of pronunciation or of spelling, and can contribute to a word’s difficulty. While most English spelling is fairly law-abiding, there are also some glaring irregularities. Words that contain silent letters are particularly problematic: *foreign, listen, headache, climbing, bored, honest, cupboard, muscle*, etc.

3) Length and complexity

*Long words* seem to be more difficult to learn than short ones. However, as a rule of thumb, high frequency words tend to be short in English, and therefore the learner is likely to meet them more often, a factor favoring their ‘learn ability’. Furthermore, variable stress in polysyllabic words—such as in word families like *necessary, necessity* and *necessarily* can add to their difficulty.

4) Grammar

It is problematic when grammar is associated with the word, especially if this differs from that of its L₁ equivalent. Spanish learners of *English*, for example, tend to assume that *explain* follows the same pattern as both Spanish *explicar* and English *tell*, and say *he explained me the lesson*. Remembering whether a verb like *enjoy, love*, or *hope* is followed by an infinitive (*to swim*) or an –ing form (*swimming*) can add to its difficulty. Then, the grammar of phrasal verbs is particularly
troublesome: some phrasal verbs are separable (she looked the word up) but others are not (she looked after the children).

5) Meaning

When two words overlap in meaning, learners are likely to confuse them. Make and do are a case in point: you make breakfast and make an appointment, but you do the housework and do a questionnaire. The words with multiple meanings such as since, and still, can also be troublesome for learners. Having learned one meaning of the word, they may be reluctant to accept a second, totally different, meaning. Unfamiliar concepts may make a word difficult to learn. Thus, culture specific items such as words and expressions associated with the game cricket (a sticky wicket, a hat trick, and a good innings) will seem fairly opaque to most learners and are likely to be easily learned.

6) Range, connotation, and idiomaticity

Words that can be used in a wide range of context will generally be perceived as easier than their synonyms with a narrower range. Thus, put is a very wide-ranging verb, compare to impose, place, position, etc. Likewise, thin is a safer bet than skinny, slim, slender. The words have style constraints, such as very informal words (chuck for throw, swap for exchange) may cause problems. Uncertainty to the connotations of some words may cause problems too. Thus, propaganda has negative connotations in English, but its
nearest equivalent in other languages may dean deviant. Finally, words or expressions that are idiomatic (like make up your mind, keep an eye on…) will generally be more difficult than words whose meaning is transparent (decide, watch). It is their idiomaticity, as well as their syntactic complexity that makes phrasal verbs so difficult.

In summary, knowing word involves knowing about its form, (the sounds, the spelling, the grammatical change that can be made to it), its meaning (its conceptual content and how it relates to other concept and words), its use (its pattern of occurrence with other words, and in particular types of language use).

From all those definition above, it can be concluded that vocabulary mastery is the students’ understanding the words and their rules to communicate. The aspects to be measured are limited to meaning, pronunciation, spelling, and using words of the words because those four aspects are learned in elementary school.

4. Teaching English Vocabulary to Elementary School Students

In local content curriculum 1994 for elementary school, English for elementary students consists of pronunciation, vocabulary, spelling, reading and functional skill. The list of English vocabulary for fourth grade students is:

1. Teaching Material

The writer just takes the material for the fourth grade students for the second semester.
• Could you make the bed, please:
• What a Nice T-shirt
• Can I have a Durian, Please
• Children’s zoo

2. The Principle of Teaching English Vocabulary as a Foreign Language.

In line with language teaching and learning, Lado (1964:50-57) states some principles of language teaching. From the principles that he proposed, there are at least three principles that can be used in teaching foreign vocabulary to the students of elementary school. These principles are as follows:

a. Pattern as Habits

The pattern as habits is established through pattern practice. To know the language is to use its pattern of construction (Lado, 1964:51). Understanding or even verbalizing a pattern may help students learn it but will never take the place of practicing the pattern through analogy; variation and transformation to establish their habits.

In relation to the beginner, the language must be started from the simplest one. The teacher may take the simple present tense pattern. For example the patterns like:

It is a book

It is a pen

It is a blackboard, etc.
b. Vocabulary Control

The vocabulary load should be kept to be minimum while the students are mastering the sound system and the grammatical pattern.

Every effort should go into teaching these elements; the local load is first held to the words needed to manipulate the pattern on illustrating the sound and contrasting then expanding the vocabulary expanded to adequate levels and specialized vocabularies taught when the basic structure has been mastered (Lado, 1964:52).

When the teacher teaches English vocabulary to the English beginning learners, the vocabulary should be limited to those which have close relation to the students’ daily life. By giving students a set of vocabulary that is adequate to their knowledge level and their daily life, they will be easy to keep these stocks of words in their memory.

c. Practice

Students must be engaged in practicing most of the learning time. This principle has psychological justification, since other things being equal, the quantity and permanence of learning are grammar translation proportion to the amount of practice (Lado, 1964: 55).

Related to vocabulary learning, students should have their learning time for practicing vocabulary to learn vocabulary and lots of exercises; it will help students keep the vocabulary in their memory much longer.
3. The Technique of Vocabulary Teaching

There are various ways to improve vocabulary mastery. The teachers may have some techniques to teach it. The technique here refers to the way of teaching. The success of teaching learning process depends on not only the teachers’ and students’ competence but also the technique of teaching.

Dealing with the technique of vocabulary teaching, there are so many techniques proposed by some experts. There are two techniques in improving vocabulary mastery. They are direct and indirect techniques. Direct technique is usually used through the language book, prose, poetry and games. Then indirect technique uses the other source of lesson like mathematic, social lesson, and science lesson.

Hatch and Brown (1995: 372) describe five essential steps in vocabulary learning. They are:

1) Having sources for encountering new words.
2) Getting clear image, whether visual or auditory or both, for the forms of the new words.
3) Learning the meaning of the words.
4) Making a strong memory connection between the forms and meaning of the words.
5) Using the words.

Vocabulary needs to be met and recycled at intervals, in different activities, with new knowledge and new connections developed each time.
The same words are met again. Looking at five steps, it can be seen that each step is in fact something that needs to happen over and over again, so that each time something new is learnt or remembered.

There are also two techniques of teaching vocabulary. The techniques are the unplanned vocabulary teaching and planned vocabulary teaching. Unplanned vocabulary teaching is extemporaneous teaching of vocabulary items that come up without planning in course of lesson, while planned vocabulary teaching occurs where the teacher goes into classroom with an item or a set of vocabulary items that the teacher has decided beforehand. The planned vocabulary teaching can be described as “the vocabulary lesson” since the primary objective of the teaching activities is the presentation and practice of the lexical items themselves.

Using the right method and material in conveying the material for young learners is a must. Wrong method can be terrible thing as students cannot pretend that they enjoy the material and listen to the teacher as if they understand what is being taught. Therefore, the following methods are important and usually used by the teacher in teaching vocabulary. They are:

1) Using songs and poem

To play with language, teachers usually use songs, poems to teach children. The learners hear pronunciation modeled and then they practice the same sounds repeatedly.
2) Dramatic activities

Dramatic activities can be helpful whether the students have a big or small production in acting the drama.

3) Storytelling

Teacher should be creative in presenting the stories. The teacher should have many ways in delivering the story. All the ways have to make the students enthusiastic.

4) Gesture and movement

Making a habit of using gesture and movement with children is a must because they need it. Children need to move around than adults do. Gesture and movement can be combined with the songs, poems, drama, or storytelling, as mentioned above.

5) Total Physical Response

Here, teacher gives command and models them. Soon, the students are asked to do the same and the other commands based on the teacher’s various commands. TPR is focused on comprehension, and the input is supposed to be comprehensible.

The Grammar-Translation Method focuses on the teaching of the foreign language grammar through the presentation of rules together with some exceptions and lists of vocabulary translated into the mother tongue. Translation is considered its most important classroom activity. The main procedure of an ordinary lesson followed this plan: a presentation of a grammatical rule, followed by a list of vocabulary and,
finally, translation exercises from selected texts (Stern 1983: 453). Other activities and procedures can be the following:

- Reading comprehension questions about the text;
- Students find antonyms and synonyms from words in the text;
- Vocabulary is selected from the reading texts and it is memorised; sentences are formed with the new words;
- Students recognise and memorise cognates and false cognates;
- Fill-in-the-blank exercises;
- Writing compositions from a given topic.

In this paper, the researcher uses Total Physical Response and Grammar Translation Method to know the effectiveness of Total Physical Response to teach vocabulary. It is because the methods that are mentioned are used in school. Then, it is also hoped that by using these methods, the students can master the four indicators of vocabulary mastery.

B. Total Psychical Response

1. The Nature of Total Physical Response

Total Physical Response is developed by James Asher, a professor of psychology. The reason for using TPR is that the students can learn much and interestingly of their language from speech directed at them in the form of command to perform actions. The goal is to teach oral proficiency at beginning level.
According to Richard (2001: 73), Total Physical Response is language teaching methods built around the coordination of speech and action; it attempts to teach language through physical (motor) activity. So the researchers can conclude that total physical response is teaching method which involves command and physical movement in the process of teaching and learning.

A typical TPR activity might contain instructions such as "Walk to the door", "Open the door", "Sit down" and "Give Maria your dictionary". The students are required to carry out the instructions by physically performing the activities. Given a supportive classroom environment, there is little doubt that such activities can be both motivating and fun, and it is also likely that with even a fairly limited amount of repetition basic instructions such as these could be assimilated by the learners, even if they were unable to reproduce them accurately themselves (http://www.onestopenglish.com/support/methodology/teachingapproaches/teaching-approaches-total-physicalresponse/146503.article).

From the definition above, it can be concluded that TPR is a language learning method based on the coordination of speech and action. It consists of a short sequence of instruction which is acted out.

2. **The Principles of Total Physical Response**

TPR have some principles. According to Larsen (2002: 111-112) the principles of TPR are as follows:
a. Meaning in 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. The target language should be presented in chunks, not just word by word.

b. The student’s understanding of the target language should be developed before speaking.

c. The imperative is a powerful linguistic device through which the teachers can grammar translation student’s behavior.

d. Students can initially learn one part of the language rapidly by moving their bodies.

e. Students can learn through observing actions as well as by performing the actions themselves.

f. It is very important that students feel successful. Feeling of success and low anxiety facilitate learning.

g. Students should not be made to memorize fixed routines.

h. Correction should be carried out in an unobtrusive manner.

i. Students must develop flexibility in understanding novel combinations of the target language chunks. They need to understand more than the exact sentences used in training. Novelty is also motivating.

j. Language learning is more effective when it is fun.

k. Spoken language should be emphasized over written language.

l. Students will begin to speak when they are ready.
To know more about Total Physical Response, the following are the basic principles of Total Physical Response which was created by Asher (1974: 244):

1. We should stress comprehension rather than production at the beginning levels of second language instruction with no demand on the learners to generate the target structure themselves.

2. We should obey the ‘here and now’ principle.

3. We should provide input to the learners by getting them to carry commands. These commands should be couched in the imperative”.

3. The Role of the Teacher and Learners in Total Physical Response

The teacher in TPR decides what to teach and models, presents the new materials. She also selects supporting materials for classroom use and in charge providing the best kind of exposure to language in order to make the learners get the basic rules of the target language. In giving feedback to the learners, the teacher corrects very little at first, but as the learners comprehend the materials she said to tolerate fewer mistakes in speech.

Learners in TPR have roles as listeners and performers. They listen to the teacher first and respond physically to command given by the teacher. Learners are expected to recognize and respond to new combination of previously thought items. They are also required to make new combinations of their own and evaluate their own progress. They will demonstrate their understanding by following oral instructions, but they will speak if only they
feel they are ready to speak. Later, students hear and repeat the words for physical actions as they watch and carry out actions. Repeating words and phrases at the same time as they carry out action help them acquire basic vocabulary as they learn a new dance, practice a specific movement, or participate in a game.

4. Design of TPR

1. Objectives

The aim of TPR is to produce learners who are capable of an uninhibited communication. Richard and Rogers (2001: 75) state that the objective of TPR is to teach oral proficiency at the beginning level. (Http://www.slideshare.net/naiken/total-physical-response) mentions some objectives of Total Physical Response such as: (1) Teaching oral proficiency at a beginning level; (2) Using comprehension as a means to speaking; and (3) Using action-based drills in the imperative form.

2. The syllabus

The type of syllabus is sentence-based syllabus with grammatical and lexical criteria being primary in selecting teaching items. TPR requires initial attention to meaning rather than to the form of items.

3. Teaching learning activity

In TPR, command is very important. The commands are given to get students to perform an action. The action makes the meaning of command clear. As the students learn more and more of the target
language, a longer series of connected commands can be given, which
together comprise a whole procedure of TPR (Larsen and Freeman, 2000: 116).

4. Learner roles

Learners in TPR have primary roles of listeners and performers. They listen attentively and respond physically to commands given by the teacher. They are encouraged to speak when they feel ready to speak, when a sufficient basic in the language has been internalized (Richard and Rogers, 2001: 76).

5. Teacher roles

The teacher has an important role in TPR. Asher in Richard and Roger (2001: 76) states that the teacher plays an active and directs role in TPR. It means that the teachers decide all things that they need to teach, such as what to teach, who models and presents the new materials, and who selects supporting materials for classroom use. In giving feedbacks to learners, teacher should refrain from to much correction in the early stage and should not interrupt to correct errors, since this will inhibit learners.

6. Materials

In TPR, materials and realia are very important. Real things are needed. Beginner may require no materials since the teachers are sufficient for classroom activities.
5. **The stages of Teaching Vocabulary using Total Physical Response**

Asher provides a lesson-by-lesson account of a course taught according to TPR principles, which serves as a source of information on the procedures used in TPR classroom. There are four steps in TPR procedure; they are (1) review; (2) new commands; (3) role reversal; and (4) reading and writing (Richard and Roger (2001: 77).

(Http://positivepractice.com/BilingualEducation/TotalPhysicalResponse%5BTPR.html) states some steps in using Total Physical Response for teaching vocabulary for the beginners:

1. **Aspect of meaning**

   a. Teacher explains in native language about the role of TPR, that is the students just listen and need not to speak at first. They have to act out the commands from the teacher.

   b. Teacher asks some volunteers to come to the front of the room and sit with her/him in chairs that are lined up facing the other students. Other students listen and watch.

   c. Teacher gives various commands beginning with verbs while doing them together with the volunteers, for example: “clap” (strike the palms of the hands together to show the approval, to mark a rhythm, or to gain attention).

   d. Teacher allows the volunteers to do the instructions and she/he remains seated.
e. Then, teacher asks one of the volunteers to perform the instructions alone.

f. Teacher approaches the other students who have been sitting observing her/him and the volunteers and gives the same commands.

g. The students follow the teacher’s instruction.

h. After the students master the instructions, the teacher gives the new ones as the steps above.

i. Teacher turns to the rest of the class and gives the commands randomly to the students.

j. The last steps, teacher writes the new commands on the blackboard. Each time she/ he write a command, she acts it out.

k. The students copy the sentences from the blackboard.

2. Aspect of spelling

a. The teacher asks the students to write the instruction on board.

b. The teacher asks volunteers to spell the words along with her.

c. The teacher asks the students randomly to spell the words alone

3. Aspect of pronunciation

a. The teacher asks a student to be an instructor.

b. Then, the first student who becomes instructor gives instructions to the second student.

c. From the first student, teacher can check the pronunciation, and from the second student, teacher can check whether the meaning is correct.
4. Aspect of using word
   
a. The teacher asks the students to make new imperative sentences spoken or written using the same words on the board.

b. The teacher asks the students to practice it using their own sentences.

Using TPR in teaching vocabulary can be fitted to real situation in the classroom. To be said mastering vocabulary, students have to know the meaning, the spelling, the pronunciation, and the use of words. In order to equip the four aspects, teacher might elaborate the steps to teach vocabulary holistically.

6. The Effectiveness of Using Total Physical Response in Teaching Vocabulary

TPR method is effective in teaching vocabulary to young learners. According to Coelho (2007: 204) TPR works well to young children who love doing physical activity. In TPR method materials and realia play an increasing role, however, in later learning stages, lessons may not require the use of materials, since the teacher’s voice, actions, and gestures may be sufficient basic for classroom activities. Next, the teacher may use common classroom objects such as pens, book, furniture, etc, as the course develops, and the teacher will need to make supporting materials to support teaching points. These may include pictures, realia, slides, and world charts.
7. The Advantages of Total Physical Response

Asher in (http://www.tpr.world.com,1) mentions some the advantages of using Total Physical Response Method as follow:

1. Total Physical Response is very easy and the usage of language contains of action games, that’s why it can help student to learn fast and effectively.

2. Total Physical Response method activities do not require a great deal of preparation on the part of the teacher. However, some other more complex applications might.

3. This method can facilitate students with the meaning in real context. Students can memorize the vocabulary by looking at the action, even though the vocabulary is not translated.

4. Fourthly, using Total Physical Response method is interesting and fun. It is very suitable for the students’ characteristics which have been mentioned before.

Other advantages are (1) it is totally flexible. For example, the teacher takes little steps to make learners pace; (2) It is relaxing for students and students learn at their own pace; (3) There is rapid understanding and long-term retention of new language.

8. Disadvantages of Total Physical Response

There are some disadvantages of the usage of Total Physical Response. They are: (1) it can be used at higher levels, TPR is most useful...
for beginners. It is also at the higher levels where preparation becomes an issue for the teacher; (2) Students are not generally given the opportunity to express their own thoughts in a creative way; (3) It is easy to overuse TPR. "Any novelty, if carried on too long, will trigger adaptation." Asher writes, "No matter how exciting and productive the innovation, people will tire of it."; (4) The teacher may find that it is limited in terms of language scope. Certain target languages may not be suited to this method; and (5) It can be a challenge for shy students (Margaret, 2003).

C. Grammar Translation Method

1. The Nature of Grammar Translation

The Grammar-Translation Method is a method of foreign or second language teaching which uses translation and grammar study as the main teaching and learning activities. The basic characteristic of the grammar-translation method is a focus on learning the grammar rules and their application in translating texts from one language into the other. Most of the teaching is provided in students’ first language. Vocabulary is presented mainly through direct translation from the native language and memorization.

According to Flowerdew and Miller (2005: 4), the Grammar Translation Method views language as descriptive set of finite rules that, once learned, gave access to the language. Grammar Translation approach was organized around step by step of learning the rules of a language, often through the use of the first language.
Meanwhile, Patel and Jain (2008: 74) state vocabulary and phraseology of foreign language can be learnt through translation its meaning into the mother tongue and the teacher points out the grammatical point and rules.

From those definitions it can be defined that Grammar Translation Method is method of teaching language that allows using native language in learning target language or the language that is used in class is mostly the students’ native language and the teacher is the authority in the classroom.

2. The Role of Grammar Translation Method

Conscious utilizing of grammar rules improve student’s grammatical accuracy, nevertheless this should not interfere with communication. For that it is essential to take into account the time necessary for new structure acquisition. In classroom conditions it is advantageous to apply this approach for activities such as writing and prepared speech, when students must be thinking about correctness or focus on form. Within these terms, given a reasonable time students are able to use obtained skills to great benefit.

Harmer (1993: 86) states that Translation seems to be a useful tool if used sparingly, but it should be used with caution. If teachers rely on the use of translation, students are losing some of the essential spirit of being in a language learning classroom. This often causes listening skills to decline. Furthermore, Harmer (1993: 86) points to the difficulties of translation, which requires an efficient speaker of both languages to
translate well. Sometimes it is worth giving the mother tongue equivalent rather than pending valuable time trying to define or show the meaning. It is of great value when no easy alternative suggests itself or highlight the danger of false cognates.

Bassnett and Guire (1991: 14) write his article ‘On Linguistic Aspects of Translation’ distinguishing three types of translation as follows:

1. Intralingual translation or rewording.
   An interpretation of verbal signs by means of other signs in the same language.

2. Interlingual translation or translation proper.
   An interpretation of verbal signs by means of some other language.

3. Intersemiotic translation or transmutation
   An interpretation of verbal signs by means of signs of nonverbal sign system.

3. The Use of Grammar Translation Method in Teaching and Learning Activity

Nation (2005: 9) introduces some techniques for teaching vocabulary. One of them is grammar translation method. He shows two examples of activities. First, teacher can use a card in introducing a new word. He/she can show the card to the students and the students will say it in English if they can, but if they can’t, the teacher immediately helps them by giving the translation of it. Another one is activating the students in using the
dictionaries. In reading activity, when a useful word occurs in a reading text, the teacher can train the students in the strategy of using a dictionary. This way is the farther way in presenting vocabulary teaching to elementary students.

Hamer in Hayati (2000: 176) suggests some techniques used for teaching vocabulary such as giving explanation. The teacher tells meaning of the new word by giving its translation in the same language. It means the teacher does not immediately translate it into mother tongue but rather explains it in long term. The explanation given can be in the form of definition, explanation, or example. Another idea is expressed by Cross (1995: 5). He says that there are two main ways in presenting vocabulary. Teacher can either show the meaning in some way or use language that the students already know in order to make clear the meaning of the new lexical item. It means that teacher can immediately show the meaning of word to the students in order to make it clear and understandable. So, both teacher and the students are not busy to have variety of activities in the vocabulary class. Teacher doesn’t need to think many suitable ways for students to understand the meaning of word, besides that, it doesn’t need much money spent for teaching and learning activities. Nida (1959: 1) agrees that grammar translation consists of producing in the target language the closest natural equivalent of the source language message, firstly with the respect to meaning and secondly with respect to style. It

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means the teacher gives the meaning of word in second language or into target language.

Duff (1989: 5) has another opinion that grammar translation has been generally out of favor for language teaching and learning. He says that grammar translation is largely ignored as a valid activity for language practice and improvement. The students can’t develop their language practically using grammar translation. Grammar translation is a passive way used for communication improvement, and even where it is still retained, it tends to be used not for language teaching, but for testing. He shows some justification why teacher doesn’t want to apply grammar translation for teaching and learning activity. Some of them are as follows: (1) grammar translation is a text – bound and only confined into two language skills, those are: reading and writing, besides that it is not a communicative activity because it involves no oral interaction; (2) grammar translation is not suitable for classroom work because the students only do writing activity which needs much time – consuming and it is very wasteful; (3) grammar translation is not suitable to the general need of language learner that is the elementary students need to be able to speak as simple as possible; (4) grammar translation is not attractive ways to present for beginner because it requires the use of mother tongue; and (5) finally, grammar translation is boring to do and to correct. He says that sometimes the researcher cannot explain the material using interesting technique so he/she decides to use the easiest way in teaching like using
grammar translation. He/she thinks that it will take time, care, and thought. Student must spend many hours to do this activity.

Tarigan (1988: 227) says that grammar translation is the oldest method used in language teaching which is lack of proficiency orientation where the students must do long writing exercise, list of vocabularies, and many academics exercise. This technique is very boring and monotonous. The students will feel uninteresting with the lesson being taught by the teacher so it makes them lazy to study and join the class. Moreover, Sardiman (2007: 90) states that the beginning students will only be motivated if the teacher presents the material well like considering the technique, method, and media used in teaching and learning.

4. The Stages of Teaching Vocabulary Using Grammar Translation Method

Here are some procedure to teach vocabulary using Grammar Translation Method proposed by Stern (1983: 453):

1. At the first stage, usually called as presentation stage, the teacher introduces the vocabularies and the meaning by giving some the reading text. And then the teacher give the model of how to pronounce those vocabulary items.
2. Main activity is the teacher drills the students many times. The teacher us the student to immitated.
3. Post activity is the student Students are asked to create sentences to illustrate; it’s useful to check that they know the meaning and use of new words. And then the student memorization of new words.

Based on the explanation above, in general the steps in applying the process methods are: 1) pre activity, 2) main activity, and 3) post activity.

5. The Advantages of Grammar Translation Method

There are some advantages and disadvantages of using Grammar Translation Method. Patel and Jain (2008: 76) state some advantages of using Grammar Translation Method in learning foreign language, as follows:

a. When words and phrases are translated into mother tongue, his understanding of those words become very better and quicker.

b. The Grammar-Translation Method develops the art of translation.

c. In this method the child associates foreign words with translated words so strong memory bond is created.

d. The use of mother tongue helps the children in vocabulary getting. It saves time and more effective.

e. The words and phrase are easily learnt and explained if translation method is used.

f. The working knowledge of mother tongue helps them to learn grammar of a foreign language. The principle of "to proceed from known to unknown"
is followed.

g. Through this method we can test the ability of comprehension of our students and we can know the form of understanding the subject matter.

h. English grammar can be easily taught by comparing with the grammar of mother tongue.

6. The Disadvantages of Grammar Translation Method

Patel and Jain also explain some Disadvantage of using Grammar Translation Method, as follows:

a. The Grammar-Translation Method does not emphasize on the basic skills like listening and speaking etc.

b. It is not possible to translate important aspect of spoken language like pronunciation, articulation, intonation, pauses, pitch etc.

c. There are words, idioms, phrases in English for which words cannot be translated into mother tongue. For example; prepositions and propositional phrases.

d. Language learning means speaking and reading but translation in mother tongue prevents students to read and speak in English.

e. Student gets no opportunities to participate in the discussion of the unit.

f. Some of language item cannot be translated into mother tongue like article a, an, the.

g. Translation into mother tongue affects the originality of the words. It affects the sense and beauty of the words.

h. It prevents students to think directly in English. Students first think in mother
tongue and then in English. Thus it prevents establishing of direct bond between thought and expression.

i. Grammar class can never be effective when there is use of translation of grammatical rules and their explanation.

j. The Grammar-Translation Method favours to teach English by rules and not by use. According to Dr. Ballard: “To speak any language whether native or foreign entirely by rules is quite impossible”.

k. Psychologically and linguistically, this method is not suitable. The language is multi-sensory whereas this method makes it only a part of the human information.

D. Learning Interest

1. Definition of Interest

   Interest is an important thing in the field of education. It is also important thing in one’s activity in his daily life. A person’s interest will be shown in his activity in reaching his purpose. There is person who is interested in something and there is another who is uninterested in the same, including learning activity.

   Webstar’s in New world dictionary defines interest as a feeling of waiting to know learn, see, or take part in something. Interest is a characteristic, disposition organized through experience, which implies an individual to seek out particular objects, activities, understanding skills or goals for attentions or recogntion (Smith and Dechant, 1961: 273).
In accordance with the definitions of interest above, it is important to pay attention to some aspects below:

1) Interest is active psyche intentness.

2) Interest is always in accordance with consciousness/ awareness, willingness, pleasure and attention.

3) Consciousness/ awareness, willingness, pleasure and attention are potential factors that enable the individual in reaching objects from his environment.

From the explanation above, it can be concluded that interest is the willingness of people to focus on a particular object of the goal to get something desired or in other words that interest leads to a focusing of attention to the maximum to obtain the desired goal.

Psychologically, interest has been variously defined as a kind of consciousness accompanying and stimulating attention, a feeling pleasant or painful directing attention—the pleasurable or painful aspect of a process of attention—and as identical with attention itself. Thus, it may be said, we attend to what interest us; and, again, that to be interested and to attend are identical. The term interest is used also to indicate a permanent mental disposition. Thus, we have an interest in certain subjects, though they are not an object of our present attention.

However interest be define, and whether it be described as a cause of attention, an aspect of attention, or as identical with attention, its special significance lies in its intimate connection with the mental activity of
attention. Attention may be defined as cognitive or intellectual energy directed towards any object. It is essentially selective; it concentrates awareness on part of the field of mental vision, whilst it ignores other parts. Attention is also purposive in character. It focuses our mental gaze in order to attain a clearer and more distinct view. It results in a deeper and more lasting impression, and therefore plays a vital part both in each cognitive act and in the growth of knowledge as a whole. As a matter of fact, what the mind takes in depends almost entirely on this selective action of attention.

Learning, however, is acquiring new knowledge, behaviors, skills, values, preferences, or understanding, and may involve synthesizing different types of information. The ability to learn is possessed by humans, animals, and some machines. Progress over time tends to follow learning curves.

Human learning occur as part of education or personal development. It may be goal-oriented and may be aided by motivation. The study of how learning occurs is part of neuropsychology, educational psychology, learning theory, and pedagogy.

Learning may occur as result of habituation or classical conditioning, seen in many animal species, as a result of more complex activities such as play, seen only in relatively intelligent animals and humans. Learning may occur conciously or without concious awareness. There is evidence for human behavioral learning prenatally, in which habituation has been
observed as early as 32 weeks into gestation, indicating that the central nervous system is sufficiently developed and primed for learning and memory to occur very early on in development.

Further, from the two concepts of learning and interest above, it can be concluded that the learning interest is an active psychological intend that always relates to consciousness, willingness, pleasure and attention in the efforts to get new behaviour and seen as something that we do in order to understand the real world in the case to achieve the goals of the English learning objective.

2) Aspects of learning interest

People are said to be interested in a certain object if they have four aspects: pleasure, willingness, consciousness, and attention. Each aspect will be explained as follows:

1) Pleasure

Pleasure seems to be derived from simply watching the movements of people and object. At first this activity is primally biological. But as perceptions occur and concepts begin to form, the psychological components become more important. The child learns to avoid those activities perceived as unsatisfying and to repeat those that have proved to be worthwhile (Skinner, 1984: 338)

2) Willingness
Willingness means a motivational desire to the purpose of life controlled by thought. This motivational desire will produce a will, attention, and the attention concentrate to a given object, then, the interest of the individual will appear. For example, a man who wants to be a doctor will have a strong will and full of attention to learn everything dealing with his expected dream and actualize it.

3) Conscioussness

A person can be said to be conscious if the quality or state of being aware especially of something within oneself. Consciousness refers to your individual awareness of your unique thoughts, memorise, feelings, sensations and environment.

4) Attention

Evidence of interest in the form of attention can be observed in the early behavior of infants. Stimulation produced by a sound or a touch causes awareness evidenced by movement of the baby and the fixation of the eyes. Infants have a need for sensory stimulation and seek to be stimulated by being alert to their surrounding (Skinner, 1984: 338)

3) Factors affecting learning interest

A child has collected experiences related to his interest before entering the school. These experiences are the determinant factors in the learning process. For example, a child who is forbidden to ask or to see

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naturally and freely will get difficulties in developing his interest. The curiosity that cannot develop freely will obstruct the process of learning.

It is important to know the factors that influence interest, especially the interest to learn so that the goals of learning can be achieved. There are two factors affecting the interest, they are internal factors and external factors.

a) Internal factors

Internal factors are factors that come from individual himself. It means that his ability, talent, motive, and his purpose of live will affect students’ interest and it is different from one to another. This different aspect will show the different interest of one to another.

Referring to Kartini Kartono (1990: 56) interest relates tightly to personality and always includes factors of affective, cognitive, and ability.

b) External factors

The external factors that come from outside (environment) the individual himself, whether family environment, school environment or the society. These factors can be an object, people or his activities in his interaction with others. For example, a boy who joins a famous because he wants to be recognized in a certain community, then he will do anything to get involved in that club.

The example above is an example of environment influence. In such condition, he is interested to do something in order he to be accepted as the member of the society, or the member of a group. The external
Factors can be in form of individual competition in a group, whether peer school or society group, in achievement competition, or job prestige competition. They only happen in the interaction with human being.

Other example of external factors are: economic background, learning materials, and teachers’ performance including their teaching methods. These factors can be an object, people or his activities in his interaction with others.

4) **Roles of interest in learning**

A person possesses interest to play an important role in every activity and in achieving certain goals, because interest will strive someone in achieving his purpose by doing the activities.

Interest plays an important role to many activities. Typical characteristics of this state might include increased attention, greater concentration, pleasant feelings of applied effort, and increased willingness to learn. So, the interest can make the goals of something can be achieved. Three major points of view are reflected in interest research: (1) interest as a characteristic of the person (interest as a personal trait or disposition), (2) interest as a characteristic of the learning environment (interestingness), and (3) interest as a psychological state (active interest, aroused interest). Both individual interest, in the sense of relatively stable preferences, and interestingness can bring about experiences and
psychological states in an individual that are generally referred to as interest.

From the explanation above, it can be stated that interest is an active psychological intent that always relates to pleasure, willingness, consciousness, and attention. Interest is one of important in learning; it can help students to achieve the goal of learning. The personal positive interest and attitudes of each learner will increase the chance for success.

E. Rationale

1. The difference between Total Physical Response and Grammar Translation for teaching vocabulary.

Total Physical Response is teaching method which involves command and physical movement in the process of teaching and learning. Total Physical Response is a language learning method based on the coordination of speaking and acting. It consists of a short sequence of instruction which is acted out. In Total Physical Response, command is very important. The commands are given to get students to perform an action. The action makes the meaning of command clear. As the students learn more and more of the target language, a longer series of connected commands can be given, which together comprise a whole procedure of Total Physical Response. This is one of the appropriate methods in teaching vocabulary for the elementary students. Total physical response is one of method in teaching learning process. In applying Total Physical
Response, four steps should be done, they are: (1) review; (2) new commands; (3) role reversal; and (4) reading and writing. This is one of the appropriate methods in teaching vocabulary for the elementary students.

Meanwhile, Grammar Translation Method is the oldest method used in language teaching which lacks of proficiency orientation where the students must do long writing exercise, list of vocabularies, and many academics exercise. This technique is very boring and monotonous. The students will feel uninterested in lesson being taught by the teacher so it makes them lazy to study and join the class.

Based on the elaboration above, the difference between Total Physical Response and Grammar Translation Method can be seen on the learning activities done and the process of getting understanding of the context. Thus, it can be assumed that using Total Physical Response is more effective.

2. The difference between students who have high learning interest and the students who have low interest.

Having high learning interest is necessary for students, if they are interested, they will be able to demonstrate in teaching learning process. They will get involved enthusiastically in all teaching activities, curious in teacher’s explanation, and giving full attention while teaching and learning process. Students learning interest is remarkable for their ability to adapt.
to almost any situation to reach their goals. The interest is one of the factors that influence success in learning.

In contrast, the students’ having low learning interest tends to be passive in joining class. They are lazy, shy, and afraid to do something because they are afraid of making mistakes. The students who have low learning interest will only sit tidily on their chair without talking anything when the teacher asks the students to do something. They do not study seriously, that is why the teacher should treat them by controlling intensively during the class, so the students will enjoy the teaching and learning process.

In line with the elaboration above, it can be assumed that the students having high learning interest have better ability in mastering vocabulary than those having low learning interest.

3. The interaction between teaching methods and learning interest.

Teaching method is important in teaching learning process. Method which is used by the teacher in the class has a big influence for making the teaching learning process run well and successful. In teaching vocabulary, the teacher has to use the appropriate and suitable method to make the students more interested and have motivation to learn and join the teaching learning process.

In Total Physical Response, the teacher combines between speaking activity and direct action. The teacher introduces how to pronounce and spell in a good manner through speaking activity, whereas she introduces
meaning and using through direct action. Students who have high learning interest are those who get involved enthusiastically in all teaching activities, curious in teacher’s explanation, and giving full attention while teaching and learning process. So it can be stated that Total Physical Response is more appropriate taught for students who have high learning interest.

Meanwhile, in Grammar translation method can’t make the students more interested in teaching learning process because they are only taught vocabulary deductively. She gives example that teacher can dedicate a number of words that are familiar to the students then asks them to write the meaning in target language, if they cannot; they use their dictionary to find the meaning of words. This method can’t also motivate the students. There is little doubt that such activities can be both creative and fun, and it is also likely that with even a fairly limited amount of repetition, basic instructions such as these could be assimilated by the learners. The students who have low learning interest are indicated by low ability to write the meaning of word. The activities in Grammar Translation Method are not as complex as in Total Physical Response. So, it can be stated that Grammar Translation Method is more appropriate taught for the students who have low learning interest.

Thus, it can be assumed that there is an interaction between the teaching methods and the students’ learning interest in teaching vocabulary. The interaction is the Total Physical Response is appropriate
for the students who have high learning interest while the GTM is appropriate for the students who have low learning interest in teaching vocabulary.

F. Hypothesis

Based on the review of related literature and rationale, the hypotheses can be formulated as follows:

1. Total Physical Response is more effective than Grammar translation Method to teach vocabulary to the fourth grade students of SDN 1 Tegaldowo in the academic year of 2011/2012.

2. The students who have high learning interest have better vocabulary mastery than those who have low interest to the fourth grade students of SDN 1 Tegaldowo in the academic year of 2011/2012.

3. There is an interaction between teaching methods and interest to teach vocabulary to the fourth grade students of SDN 1 Tegaldowo in the academic year of 2010/2012.
CHAPTER III

RESEARCH METHODOLOGY

This chapter is devoted to discuss (1) Research Method; (2) Research Design, (3) Place and Time of the Study; (4) Subject of the Study (Population, Sample, and Sampling); (5) Techniques of Collecting the Data; (6) The Variables of the Research; (7) Techniques of Analyzing the Data; and (8) Statistical Hypotheses.

A. Research Method

The design of this research is experimental study with a quantitative approach. A quantitative approach is a kind of research that gives a pressure in systematic analysis, using statistic analysis toward the quantitative data that include correlation study and experiment.

Experimental research is one of the most powerful research methodologies, because it is the best way to establish cause and effect relationship between variables. Ary, et al. (1975: 225) agree that experiment is the most complicated research for testing hypothesis. There are five designs in experimental study. They are (1) pre-experimental design; (2) True experimental designs; (3) Factorial designs; (4) Quasi-Experimental designs; and (5) Time-series designs. Because the researcher wants to assess both independent variables, and factorial design is used to analyze the main effects for both experimental variables as well as an analysis of interaction between the treatments.
Factorial design is a further development of experimental technique, which allows for two or more different characteristics, treatments, or events to be independently varied within a single study. This is a logical approach to examine multiple-causality. This research is designed to describe and prove the effectiveness of Total Physical Response in teaching vocabulary to improve students’ vocabulary mastery and to attract the students so they are more creative in learning process.

B. Research Design

After the variables have been identified, the next step is determining the experimental design. Wiersma (2001: 76) defines experimental design as follows:

In its broadest sense, an experimental design is preconceived plan for conducting an experiment. More specifically, an experimental design is the structure by which variables are positioned, arranged, or built into experiment. The design includes the independent variable(s), which must include the experimental variable(s) and possibly other variables.

In other words, it can be said that experimental design is the structure by which variables are positioned or arranged in the experiment. The purpose of experimental design is to make a sense of the result of the study and enhance control.

There are some experimental designs. The most appropriate experimental design for this study is factorial design. Factorial designs extend the number of relationships that may be examined in an experimental study. Tuckman (1978: 135) defines that factorial design allows a researcher to study the interaction of an independent variable with one or more other variables, sometimes called as...
moderator variables. It can be said that factorial design is one of the efficient ways to study several relationships with one set of data. In line with this design, it is possible to assess the effect of each independent variable separately as well as their conjoint or simultaneous effect or interaction.

This factorial design is illustrated as follows:

<table>
<thead>
<tr>
<th>Simple Effect</th>
<th>Main Effect</th>
<th>( A_1 )</th>
<th>( A_2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>( B_1 )</td>
<td>( A_1B_1 )</td>
<td>( A_2B_1 )</td>
<td></td>
</tr>
<tr>
<td>( B_2 )</td>
<td>( A_1B_2 )</td>
<td>( A_2B_2 )</td>
<td></td>
</tr>
</tbody>
</table>

Table 3.1: The table for each cells.

A is the methods of teaching used in this research. \( A_1 \) and \( A_2 \) are divided into \( A_1 \) and \( A_2 \). \( A_1 \) is the Total Physical Response and \( A_2 \) is Grammar Translation Method. Then, B is the attributive (moderator) variable. In this research, B is Learning Interest. \( B_1 \) represents students having high learning interest while \( B_2 \) represents students having low learning interest. Next, \( A_1B_1 \), \( A_1B_2 \), \( A_2B_1 \), \( A_2B_2 \) are used to designate an observation or measurement of the variables.

C. Place and Time of the Study

This research took place at SDN 1 Tegaldowo Bantul. It is located at Ds. Grujugan Ds. Bantul Kec. Bantul Kab. Bantul. This school has 12 classes and each class consists of 24 students. This research was done in the second semester of SDN 1 Tegaldowo students from February to April in the academic year of 2012/2013.
D. Subject of the Study (Population, Sample, and Sampling)

1. Population

Population is a number of individuals, which have at least one similar characteristic (Hadi, 1983: 70). According to Burke (2000: 158) population is the set of all elements. It is the large group to which a researcher wants to generalize his or her sample result. In line with Burke, Arikunto (2002: 108) says that population is all the individuals of that group. So, from the ideas above, it can be concluded that population is a number of individuals that have at least one characteristic in common and to which a researcher wants to generalize his or her sample result. In this research, the population was the fourth grade students of SDN 1 Tegaldowo in the academic year of 2011/2012. They are grouped into 2 classes (IV A – IV B) where each class consists of 24 students. Total number of the fourth year is 48 students.

2. Sample

Sample is part of population being researched (Arikunto, 2002:109). Burke (2000: 158) also says that sample is a set of elements taken from a larger population according to certain rules. So, it can be concluded that sample is a small portion of a population assigned according to certain rules.

The sample that is used in this research is the fourth grade students which consist of 2 classes. Two classes are used in this research, one class is experimental group and another one is control group. The samples are class IV
B for experimental group which consist of 24 student and class IV A for control group which consist of 24 student.

3. Sampling

In determining the sample, the research employed total sampling technique because the researcher uses all the population as the sample of the research. The technique was used because the subjects of the study are less than 100 (small number).

Meanwhile, in determining the sample into the experimental and control class, the researcher chose the class randomly. The technique was used because the subjects of the study are homogeneous. The first class (class A) was chosen as the experimental class and the second class (class B) as the control class.

E. Techniques of Collecting the Data

The data to support the research are collected from the students using three kinds of tests; multiple-choice test, oral test, and questionnaire. The students must do a test of multiple-choice test dealing with mastering vocabulary after getting some treatments. This multiple choice test is formulated based on indicators of vocabulary: meaning relationship, spelling, and using the words in sentences.

On the other hand, oral test is formulated for pronunciation of the new words. In this test, the students are asked to pronounce some words that they have learned. Students are asked to read the some words aloud while the researcher listens and scores. This way is one of the most common ways of testing
pronunciation in which students read aloud words and sentences (Madsen, 1983: 66).

To measure the students’ learning interest, the researcher will use questionnaire. Wilson and Mclean in Cohen, Manion, and Morrison (2005: 262) believe that the questionnaire is a widely used and useful instrument for collecting information. This kind of information can be transformed into numbers or quantitative data by using the scaling or rating-scale techniques or by counting the number of respondents who give a particular response, thus generating frequency data. The questionnaire is used to classify students into two groups, students who have high learning interest and those who have low learning interest. The researchers employ median to classify the sample. The students who have greater score than median are classified into high learning interest students and the rest or the students who have less score than median are classified into low learning interest students. The questionnaire consists of statements about students learning interest. There are four alternatives that can be chosen in each item and there is no right or wrong answer since the students’ response are based on their real condition.

All good instruments test posses two qualities: validity and reliability. Reliability refers to the consistency of the measure. Reliability and validity are the most important characteristics of measuring instruments.

The instruments of try-out needs to be analyzed and the scores of try-out are analyzed in term of their validity and reliability. In this research, the kinds of validity and reliability being analyzed are internal validity and internal reliability.
In this research, there would be two kinds of test. The first was vocabulary and students’ learning interest test. The validity and reliability of both tests were measured to give the accurate result.

The validity of the vocabulary test items are measured by using Biserial point correlation formula as follows:

\[ r_i = \frac{\overline{X}_i - \overline{X}_t}{s_t} \sqrt{\frac{p_i}{p_2}} \]

Where:

- \( r_{bis} \): Biserial point correlation validity
- \( S_t \): standard of deviation
- \( p \): the testy proportion that can answer the correct answer of items.
- \( q \): 1 - \( p \)
- \( \overline{X}_t \): the average of total score for all testy
- \( \overline{X}_i \): the average of score testy for the correct answer

The result of the computation of validity would be consulted to the \( r \) table. The test items are valid if \( r_{obtained} \) is higher than \( r_{table} \) or \( r_o > r_t \) and invalid if \( r_{obtained} \) is lower than \( r_{table} \) or \( r_o < r_t \).

After the valid items were determined, the writer needed to measure the reliability of the instrument. The formula for computing reliability was as follows.

\[ r_{kk} = \frac{k}{k-1} \left(1 - \frac{k}{s^2} \sum pq\right) \]

Where:

- \( r_{kk} \) = reliability coefficient
\[ k = \text{the number of test items} \]
\[ p = \text{the proportion of test takers who pass the items} \]
\[ q = \text{the proportion of test takers who fail the items} \]
\[ s^2_t = \text{the variance of the total test scores} \]

The result of the computation of reliability would be consulted to the \( r \) table in order to know whether or not the instrument is reliable. The instrument is reliable if \( r \) obtained or \( r_{obtained} \) is higher than \( r \) table or \( r_{obtained} > r_{table} \).

Meanwhile, the validity of learning interest was measured by Product Moment Correlation by Karl Pearson formula as follows:

\[
r_{obtained} = \frac{\sum_{i=1}^{n} XY - (\sum_{i=1}^{n} X)(\sum_{i=1}^{n} Y)}{\sqrt{\left\{\sum_{i=1}^{n} X^2 - (\sum_{i=1}^{n} X)^2\right\}\left\{\sum_{i=1}^{n} Y^2 - (\sum_{i=1}^{n} Y)^2\right\}}}\]

The result of the computation of validity would be consulted to the \( r \) table. The test items are valid if \( r \) obtained is higher than \( r \) table or \( r_{obtained} > r_{table} \) and invalid if \( r \) obtained is lower than \( r \) table or \( r_{obtained} < r_{table} \).

After validity was measured, the writer should determine the reliability of the student learning interest instruments. It was determined by using Alpha Cronbach formula as follows:

\[
r_{\alpha} = \left(\frac{k}{k-1}\right)(1 - \frac{\sum s^2_i}{s^2_t})\]

Where:
\[ r_{\alpha} = \text{reliability coefficient} \]
\[ k = \text{the number of test items} \]
\[ s^2_i = \text{item variance} \]
\[ s^2_t = \text{the variance of the total test scores} \]
The instrument of learning interest is reliable if the result is higher than \( r_{table} \) or \( r_0 > r_l \).

**F. The Variables of the Research**

There were two kinds of variables; independent variable and dependent variable. In this research, those variables were as follows:

1. **Independent variables 1 (X₁)**: Total Physical Response and Grammar Translation Method

   Independent variable 2 (X₂): Students’ learning interest at SDN 1 Tegaldowo

2. **Dependent variable (Y)**: Vocabulary mastery

<table>
<thead>
<tr>
<th>Main Effect</th>
<th>TPR (A₁)</th>
<th>GTM (A₂)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HLI (B₁)</strong></td>
<td>( A₁B₁ )</td>
<td>( A₂B₁ )</td>
</tr>
<tr>
<td><strong>LLI (B₂)</strong></td>
<td>( A₁B₂ )</td>
<td>( A₂B₂ )</td>
</tr>
</tbody>
</table>

Where:

\( A₁B₁ \) : Group of students having High Learning Interest (HLI) who are taught using Total Physical Response.

\( commit to user \)
A₁B₂ : Group of students having Low Learning Interest (LLI) who are taught using Total Physical Response.
A₂B₁ : Group of students having High Learning interest (HLI) who are taught using Grammar Translation Method.
A₂B₂ : Group of students having Low Learning Interest (LLI) who are taught using Grammar Translation Method.
A₁ : The students who are taught using Total Physical Response
A₂ : The students who are taught using Grammar Translation Method
B₁ : The students who have High Learning Interest
B₂ : The students who have Low Learning Interest

G. Technique of Analyzing the Data

In this research, the techniques used in analyzing the data were descriptive statistic and inferential analysis. The descriptive analysis was used to find the mean, median, mode, and standard deviation of student’s scores in vocabulary mastery. Meanwhile, the inferential analysis was used to test the hypotheses. In this research, the researcher applied 2 x 2 ANOVA and Tukey Test. The researcher used 2 x 2 ANOVA to find out whether the difference between experimental and control group was significant.

Before conducting 2 x 2 ANOVA, as a requirement, the data had to be tested using normality and homogeneity tests. The discussion of normality test and homogeneity test were as follows:

commit to user
1. Normality test

Normality test was used to know whether the data had normal distribution or not. In order to test the normality, the writer used Liliefors formula. The sample was on normal distribution if \( L_o \) (L obtained) is lower than \( L_t \) (L table) at the level of significance \((\alpha) = 0.05\), L stands for Lilliefors.

2. Homogeneity test

Homogeneity test was done to know that the data were homogenous. If \( x_o^2 \) is lower than \( x_t^2 \) (0.05), it could be concluded that the data are homogeneous.

Here is the table of 2 x 2 ANOVA:

Table 3.3 The Points on 2 x 2 ANOVA

<table>
<thead>
<tr>
<th>Main Effect</th>
<th>Total Physical Response</th>
<th>Grammar Translation Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple Effect</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Learning Interest</td>
<td>( \sum X )</td>
<td>( \sum X )</td>
</tr>
<tr>
<td>Low Learning Interest</td>
<td>( \sum X )</td>
<td>( \sum X )</td>
</tr>
<tr>
<td>Total</td>
<td>( \sum X )</td>
<td>( \sum X )</td>
</tr>
</tbody>
</table>

The analyses were as follows:

a. The total sum of the squares

\[
\sum x_i^2 = \sum X_i^2 - \left( \frac{\sum X_i}{N} \right)^2
\]
b. The sum of squares between groups

$$
\sum x^2_b = \frac{\left( \sum X_1 \right)^2}{n_1} + \frac{\left( \sum X_2 \right)^2}{n_2} + \frac{\left( \sum X_3 \right)^2}{n_3} + \frac{\left( \sum X_4 \right)^2}{n_4} - \frac{\left( \sum X \right)^2}{N} 
$$

c. The sum of squares within groups

$$
\sum x^2_w = \sum X^2 - \sum x^2_b 
$$

d. The between-columns sum of squares

$$
\sum x^2_{bc} = \frac{\left( \sum X_{1c} \right)^2}{n_{c1}} + \frac{\left( \sum X_{2c} \right)^2}{n_{c2}} + \frac{\left( \sum X \right)^2}{N} 
$$

e. The between-rows sum of squares:

$$
\sum x^2_{br} = \frac{\left( \sum X_{r1} \right)^2}{n_{r1}} + \frac{\left( \sum X_{r2} \right)^2}{n_{r2}} + \frac{\left( \sum X \right)^2}{N} 
$$

f. The sum-of-squares interaction:

$$
\sum x^2_{int} = \sum b^2 - \left( \sum x^2_{bc} + \sum x^2_{br} \right) 
$$

g. The number or degrees of freedom (df):

1) df for between-columns sum of squares : C – 1

2) df for between-rows of squares : R – 1

3) df for interaction : (C – 1)( R – 1)

4) df for between-groups sum of squares: G – 1

5) df for within-groups sum squares : \( \sum (n – 1) \)

6) df for total sum of squares : N – 1

Where:

C = the number of columns

R = the number of rows
G = the number of groups

N = the number of subject in all groups

n = the number of subject in one group

Here is the table for summarizing 2 x 2 ANOVA:

<table>
<thead>
<tr>
<th>Score of Variance</th>
<th>SS</th>
<th>Df</th>
<th>MS</th>
<th>( F_{a} )</th>
<th>( F_{a(6,6)} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between column (Methods of Teaching)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between rows (Level of Learning Interest)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Columns by rows (Interaction)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. **Tuckey test**

Tukey test was a statistical test generally used in conjunction with an ANOVA. The test compared the means or every treatment to the means of every other treatment, and identified where the difference between two means was greater than the standard error would be expected to allow. The formula for this test was as follows:

1. The differences between Total Physical Response and Grammar Translation Method:

\[
q = \frac{\bar{X}_{c1} - \bar{X}_{c2}}{\sqrt{\text{Error Variance} \cdot n}}
\]
2. The differences between the students who have high Learning Interest and the students who have low Learning Interest:

\[ q = \frac{\bar{X}_{r1} - \bar{X}_{r2}}{\sqrt{\text{ErrorVariance}}/n} \]

3. The differences between Total Physical response and Grammar Translation Method for the students who have high Learning Interest:

\[ q = \frac{\bar{X}_{c1r1} - \bar{X}_{c2r1}}{\sqrt{\text{ErrorVariance}}/n} \]

4. The differences between Total Physical Response and Grammar Translation Method who have low learning interest.

\[ q = \frac{\bar{X}_{c1r2} - \bar{X}_{c2r2}}{\sqrt{\text{ErrorVariance}}/n} \]

\[ q = \frac{\bar{X}_{c2r2} - \bar{X}_{c1r2}}{\sqrt{\text{ErrorVariance}}/n} \]

The statistic test was found by dividing the difference between the means by the square root of the ratio of the within group variation and the sample size.

\[ \text{ST: } q = \frac{\bar{X}_i - \bar{X}_j}{\sqrt{s^2/w/n}} \]
H. Statistical Hypotheses

In this research, the researcher proposed three hypotheses. These hypotheses were based on the formulation of the problems. They were:

1. The differences between Total Physical Response \( (A_1) \) and Grammar Translation Method \( (A_2) \) to teach vocabulary for the students at the elementary school.

\[
H_0: \mu_{A1} = \mu_{A2} \\
H_a: \mu_{A1} > \mu_{A2}
\]

2. The differences between the students who have high Learning Interest \( (B_1) \) and those who have low learning interest\( (B_2) \).

\[
H_0: \mu_{B1} = \mu_{B2} \\
H_a: \mu_{B1} > \mu_{B2}
\]

3. Interaction between the methods used (Total Physical Response and Grammar Translation Method) \( (A) \) and Learning Interest \( (B) \) in teaching vocabulary for the students at the elementary school.

\[
H_0: AXB = 0 \\
H_a: AXB > 0
\]
CHAPTER IV
RESEARCH FINDING

This chapter discusses the result of the study. The first thing to do after giving treatments to the sample is conducting the vocabulary test. It is intended to obtain the students’ scores as research data. The data obtained from the post era are analyzed to get the clear conclusion. The steps of analysis can be classified as follows: (1) data description; (2) Data analysis; (3) Hypothesis testing; and (4) Discussion of the findings. These four steps can be classified and explained clearly as follows:

A. The Description of the Data

The students’ scores are distributed into 8 categories: (1) the scores of the students who are taught using Total Physical Response (A1); (2) the score of those who are taught using Grammar Translation Method (A2); (3) the score of those having high English learning interest (B1); (4) the score of those having low English learning interest (B2); (5) the score of those having high learning interest who are taught using Total Physical Response (A1B1); (6) the scores of those having low learning interest who are taught using Total Physical Response (A1B2); (7) the scores of those having high learning interest who are taught using Grammar Translation Method (A2B1); (8) the scores of those having low learning interest who are taught using Grammar Translation Method (A2B2).

The description of the students’ scores in each category is as follows:
1. The scores of the students who are taught using TPR \((A_1)\)

The students’ correct answers are: 34 35 28 28 30 32 33 26 27 23 25 19 19 20 20 20 21 22 22 17 18 18.

The data description shows that the range of the score is 17 up to 35. The mean is 24.50. The mode is 20, the median is 24, and the standard deviation is 5.45. The number of class used is 5 and the class interval is 4. Histogram and polygon are presented in table 4.1 and figure 4.1

<table>
<thead>
<tr>
<th>Class Limit</th>
<th>Class Boundaries</th>
<th>Frequency ((f_i))</th>
<th>Midpoint ((X_i))</th>
<th>(X_i^2)</th>
<th>(f_iX_i)</th>
<th>(f_iX_i^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>17 - 20</td>
<td>16.5-20.5</td>
<td>8</td>
<td>18.5</td>
<td>342.25</td>
<td>148</td>
<td>2738</td>
</tr>
<tr>
<td>21 - 24</td>
<td>20.5-24.5</td>
<td>4</td>
<td>22.5</td>
<td>506.25</td>
<td>90</td>
<td>2025</td>
</tr>
<tr>
<td>25 - 28</td>
<td>24.5-28.5</td>
<td>7</td>
<td>26.5</td>
<td>702.25</td>
<td>185.5</td>
<td>4915.75</td>
</tr>
<tr>
<td>29 - 32</td>
<td>28.5-32.5</td>
<td>2</td>
<td>30.5</td>
<td>930.25</td>
<td>61</td>
<td>1860.5</td>
</tr>
<tr>
<td>33 - 36</td>
<td>32.5-36.5</td>
<td>3</td>
<td>34.5</td>
<td>1190.25</td>
<td>103.5</td>
<td>3570.75</td>
</tr>
<tr>
<td></td>
<td></td>
<td>24</td>
<td></td>
<td></td>
<td></td>
<td>588</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15110</td>
</tr>
</tbody>
</table>

\[\text{Figure 4.1} \text{ The histogram and polygon of the scores of students taught using TPR}\]
2. The score of those who are taught using Grammar Translation Method (A$_2$)

The students’ correct answers are: 20 21 21 22 24 24 25 25 25 22 23 17 23 24 17 18 19 20 20 23 23 24 26 27

The data description shows that the range of the score is 17 up to 27. The mean is 22.2. The modes are 23 and 24. The median is 23, and the standard deviation is 2.76. The number of class used is 6 and the class interval is 2. Histogram and polygon are presented in table 4.2 and figure 4.2

**Table 4.2** The score of the students taught using GTM

<table>
<thead>
<tr>
<th>Class Limit</th>
<th>Class Boundaries</th>
<th>Frequency ($f_i$)</th>
<th>Midpoint ($X_i$)</th>
<th>$X_i^2$</th>
<th>$F_i X_i$</th>
<th>$F_i X_i^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>17-18</td>
<td>16.5 – 18.5</td>
<td>3</td>
<td>17.5</td>
<td>306.25</td>
<td>52.5</td>
<td>918.75</td>
</tr>
<tr>
<td>19-20</td>
<td>18.5 – 20.5</td>
<td>4</td>
<td>19.5</td>
<td>380.25</td>
<td>78.0</td>
<td>1521.0</td>
</tr>
<tr>
<td>21-22</td>
<td>20.5 – 22.5</td>
<td>4</td>
<td>21.5</td>
<td>462.25</td>
<td>86.0</td>
<td>1849.0</td>
</tr>
<tr>
<td>23-24</td>
<td>22.5 – 23.5</td>
<td><strong>8</strong></td>
<td>23.5</td>
<td>552.25</td>
<td>188.0</td>
<td>4418.0</td>
</tr>
<tr>
<td>25-26</td>
<td>23.5 – 25.5</td>
<td>4</td>
<td>25.5</td>
<td>650.25</td>
<td>102.0</td>
<td>2601.0</td>
</tr>
<tr>
<td>27-28</td>
<td>25.5 – 27.5</td>
<td>1</td>
<td>27.5</td>
<td>756.25</td>
<td>27.5</td>
<td>756.25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>24</td>
<td></td>
<td>2801.25</td>
<td>481.5</td>
<td>11145.25</td>
</tr>
</tbody>
</table>

**Figure 4.2** The histogram and polygon of the scores of students taught using GTM
3. The score of those having high English learning interest (B₁)

The students’ correct answers are: 33 34 35 17 26 27 21 23 24 25 28 17 18 25 26
19 20 24 25 20 25 28 30 32

The data description shows that the range of the score is 17 up to 35. The
mean is 25.08. The mode is 25, the median is 25, and the standard deviation is
5.2. The number of class used is 5 and the class interval is 4. Histogram and
polygon are presented in table 4.3 and figure 4.3.

Table 4.3 The scores of the students having high learning interest

<table>
<thead>
<tr>
<th>Class Limit</th>
<th>Class Boundaries</th>
<th>Frequency (f₁)</th>
<th>Midpoint ((X₁))</th>
<th>(X₁^2)</th>
<th>(F₁X₁)</th>
<th>(F₁X₁^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>17 - 20</td>
<td>16.5-19.5</td>
<td>6</td>
<td>18.5</td>
<td>342.25</td>
<td>111</td>
<td>2053.5</td>
</tr>
<tr>
<td>21 - 24</td>
<td>19.5-23.5</td>
<td>4</td>
<td>22.5</td>
<td>506.25</td>
<td>90</td>
<td>2025</td>
</tr>
<tr>
<td>25 -28</td>
<td>23.5-27.5</td>
<td>9</td>
<td>26.5</td>
<td>702.25</td>
<td>238.5</td>
<td>6320.25</td>
</tr>
<tr>
<td>29 -32</td>
<td>27.5-31.5</td>
<td>2</td>
<td>30.5</td>
<td>930.25</td>
<td>61</td>
<td>1860.5</td>
</tr>
<tr>
<td>33 -36</td>
<td>31.5-35.5</td>
<td>3</td>
<td>34.5</td>
<td>1190.25</td>
<td>103.5</td>
<td>3570.75</td>
</tr>
</tbody>
</table>

Figure 4.3 The histogram and polygon of the scores of the students having high
learning interest
4. The score of those having low English learning interest (B_2)

The students’ correct answers are: 24 19 20 23 23 25 18 19 26 21 22 27 17 18 20 21 20 22 23 22 22 23 24

The data description shows that the range of the score is 17 up to 27. The mean is 21.62. The modes are 20, 22, and 23, the median is 22, and the standard deviation is 2.5. The number of class used is 6 and the class interval is 2. Histogram and polygon are presented in table 4.4 and figure 4.4

<table>
<thead>
<tr>
<th>Class Limit</th>
<th>Class Boundaries</th>
<th>Frequency (f_i)</th>
<th>Midpoint (X_i)</th>
<th>X_i^2</th>
<th>F_i X_i</th>
<th>F_i X_i^2</th>
</tr>
</thead>
<tbody>
<tr>
<td>17 - 18</td>
<td>16.5-18.5</td>
<td>3</td>
<td>17.5</td>
<td>306.25</td>
<td>52.5</td>
<td>918.75</td>
</tr>
<tr>
<td>19 - 20</td>
<td>18.5-20.5</td>
<td>6</td>
<td>19.5</td>
<td>380.25</td>
<td>117</td>
<td>2281.5</td>
</tr>
<tr>
<td>21 - 22</td>
<td>20.5-22.5</td>
<td>6</td>
<td>21.5</td>
<td>462.25</td>
<td>129</td>
<td>2773.5</td>
</tr>
<tr>
<td>23 - 24</td>
<td>22.5-24.5</td>
<td>6</td>
<td>23.5</td>
<td>552.25</td>
<td>141</td>
<td>3313.5</td>
</tr>
<tr>
<td>25 - 26</td>
<td>24.5-26.5</td>
<td>2</td>
<td>25.5</td>
<td>650.25</td>
<td>51</td>
<td>1300.5</td>
</tr>
<tr>
<td>27 - 28</td>
<td>26.5-28.5</td>
<td>1</td>
<td>26.5</td>
<td>702.25</td>
<td>26.5</td>
<td>702.25</td>
</tr>
</tbody>
</table>

**Figure 4.4** The histogram and polygon of the scores of the students having low learning interest
5. The score of those having high learning interest who are taught using Total Physical Response (A1B1)

The students’ correct answers are: 25 33 28 30 34 26 27 28 35 25 26 32

The data description shows that the range of the score is 25 up to 35. The mean is 29.08. The modes are 25, 26 and 28, the median is 28, and the standard deviation is 3.6. The number of class used is 4 and the class interval is 3. Histogram and polygon are presented in table 4.5 and figure 4.5

**Table 4.5** The scores of the students having high learning interest taught using Total physical Response.

<table>
<thead>
<tr>
<th>Class Limit</th>
<th>Class Boundaries</th>
<th>Frequency (f1)</th>
<th>Midpoint (X1)</th>
<th>X1^2</th>
<th>F1 X1</th>
<th>F1 X1^2</th>
</tr>
</thead>
<tbody>
<tr>
<td>24-26</td>
<td>23.5-26.5</td>
<td>4</td>
<td>25</td>
<td>625</td>
<td>100</td>
<td>2500</td>
</tr>
<tr>
<td>27-29</td>
<td>26.5-29.5</td>
<td>3</td>
<td>28</td>
<td>784</td>
<td>84</td>
<td>2352</td>
</tr>
<tr>
<td>30-32</td>
<td>29.5-32.5</td>
<td>2</td>
<td>31</td>
<td>961</td>
<td>62</td>
<td>1922</td>
</tr>
<tr>
<td>33-35</td>
<td>32.5-35.5</td>
<td>3</td>
<td>34</td>
<td>1156</td>
<td>102</td>
<td>3468</td>
</tr>
</tbody>
</table>

**Figure 4.5** The histogram and polygon of the scores of the students having high learning interest taught using Total Physical Response.
6. The scores of those having low learning interest who are taught using Total Physical Response (A_1B_2)

The students’ correct answers are: 19 20 17 20 21 18 22 19 20 23 18 22

The data description shows that the range of the score is 17 up to 23. The mean is 19.91. The mode is 20, the median is 20, and the standard deviation is 1.8. The number of class used is 4 and the class interval is 2. Histogram and polygon are presented in Table 4.6 and Figure 4.6.

**Table 4.6** The scores of the students having low learning interest who are taught using Total Physical Response.

<table>
<thead>
<tr>
<th>Class Limit</th>
<th>Class Boundaries</th>
<th>Frequency (f_i)</th>
<th>Midpoint (X_i)</th>
<th>X_i^2</th>
<th>F_i X_i</th>
<th>F_i X_i^2</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-17</td>
<td>15.5-17.5</td>
<td>1</td>
<td>16.5</td>
<td>272.25</td>
<td>16.5</td>
<td>272.25</td>
</tr>
<tr>
<td>18-19</td>
<td>17.5-19.5</td>
<td>4</td>
<td>18.5</td>
<td>342.25</td>
<td>74</td>
<td>1369</td>
</tr>
<tr>
<td>20-21</td>
<td>19.5-21.5</td>
<td>4</td>
<td>20.5</td>
<td>420.25</td>
<td>82</td>
<td>1681</td>
</tr>
<tr>
<td>22-23</td>
<td>21.5-23.5</td>
<td>3</td>
<td>23.5</td>
<td>552.25</td>
<td>70.5</td>
<td>1656.75</td>
</tr>
</tbody>
</table>

**Figure 4.6** The histogram and polygon of the scores of the students having low learning interest taught using Total Physical Response.
7. The scores of those having high learning interest who are taught using Grammar Translation Method (A$_{2}$ B$_{1}$)

The students’ correct answers are: 19 20 17 23 24 17 18 24 25 20 21 25

The data description shows that the range of the score is 17 up to 25. The mean is 21.08. The modes are 17, 20, 24, and 25, the median is 20.5, and the standard deviation is 3.05. The number of class used is 5 and the class interval is 2. Histogram and polygon are presented in table 4.7 and figure 4.7.

**Table 4.7** The scores of the students having high learning interest taught using GTM

<table>
<thead>
<tr>
<th>Class Limit</th>
<th>Class Boundaries</th>
<th>Frequency $(f_1)$</th>
<th>Midpoint $(X_1)$</th>
<th>$X_1^2$</th>
<th>$F_1 X_1$</th>
<th>$F_1 X_1^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>17-18</td>
<td>16.5-18.5</td>
<td>3</td>
<td>17.5</td>
<td>306.25</td>
<td>52.5</td>
<td>918.75</td>
</tr>
<tr>
<td>19-20</td>
<td>18.5-20.5</td>
<td>3</td>
<td>19.5</td>
<td>380.25</td>
<td>58.5</td>
<td>1140.75</td>
</tr>
<tr>
<td>21-22</td>
<td>20.5-22.5</td>
<td>1</td>
<td>21.5</td>
<td>462.25</td>
<td>21.5</td>
<td>462.25</td>
</tr>
<tr>
<td>23-24</td>
<td>22.5-24.5</td>
<td>3</td>
<td>23.5</td>
<td>552.25</td>
<td>70.5</td>
<td>1656.75</td>
</tr>
<tr>
<td>25-26</td>
<td>24.5-26.5</td>
<td>2</td>
<td>25.5</td>
<td>650.25</td>
<td>51</td>
<td>1300.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Figure 4.7** The histogram and polygon of the scores of the students having high learning interest taught using GTM.
8. The scores of those having low learning interest who are taught using Grammar Translation Method (A₂B₂)

The students’ correct answers are: 23 20 21 24 22 23 24 22 26 27 23 25

The data description shows that the range of the score is 20 up to 27. The mean is 23.33. The mode is 23, the median is 23, and the standard deviation is 2.0. The number of class used is 4 and the class interval is 2. Histogram and polygon are presented in table 4.8 and figure 4.8.

**Table 4.8** The scores of the students having low learning interest taught using GTM

<table>
<thead>
<tr>
<th>Class Limit</th>
<th>Class Boundaries</th>
<th>Frequency (fᵢ)</th>
<th>Midpoint ((Xᵢ))</th>
<th>(Xᵢ^2)</th>
<th>(fᵢXᵢ)</th>
<th>(fᵢXᵢ^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-21</td>
<td>19.5-21.5</td>
<td>2</td>
<td>20.5</td>
<td>420.25</td>
<td>41</td>
<td>840.5</td>
</tr>
<tr>
<td>22-23</td>
<td>21.5-23.5</td>
<td><strong>5</strong></td>
<td>22.5</td>
<td>506.25</td>
<td>112.5</td>
<td>2531.25</td>
</tr>
<tr>
<td>24-25</td>
<td>23.5-25.5</td>
<td>3</td>
<td>24.5</td>
<td>600.25</td>
<td>73.5</td>
<td>1800.75</td>
</tr>
<tr>
<td>26-27</td>
<td>25.5-27.5</td>
<td>2</td>
<td>26.5</td>
<td>702.25</td>
<td>53</td>
<td>1404.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Figure 4.8** The histogram and polygon of the scores of the students having low learning interest taught using GTM.
B. Data Analysis

1. Normality

Before analyzing the data for testing the hypotheses, the researcher analyzes the normality and homogeneity of the data. The following is the summary of normality of the sample distribution. (Appendix 11).

Table 4.9 The summary of the normality of the sample distribution

<table>
<thead>
<tr>
<th>NO</th>
<th>DATA</th>
<th>NUMBER OF SAMPLE</th>
<th>L₀</th>
<th>Lₜ</th>
<th>ALPHA</th>
<th>DISTRIBUTION OF SAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A₁</td>
<td>24</td>
<td>0.131</td>
<td>0.173</td>
<td>0.05</td>
<td>NORMAL</td>
</tr>
<tr>
<td>2</td>
<td>A₂</td>
<td>24</td>
<td>0.076</td>
<td>0.173</td>
<td>0.05</td>
<td>NORMAL</td>
</tr>
<tr>
<td>3</td>
<td>B₁</td>
<td>24</td>
<td>0.123</td>
<td>0.173</td>
<td>0.05</td>
<td>NORMAL</td>
</tr>
<tr>
<td>4</td>
<td>B₂</td>
<td>24</td>
<td>0.110</td>
<td>0.173</td>
<td>0.05</td>
<td>NORMAL</td>
</tr>
<tr>
<td>5</td>
<td>A₁ B₁</td>
<td>12</td>
<td>0.20</td>
<td>0.22</td>
<td>0.05</td>
<td>NORMAL</td>
</tr>
<tr>
<td>6</td>
<td>A₁ B₂</td>
<td>12</td>
<td>0.15</td>
<td>0.22</td>
<td>0.05</td>
<td>NORMAL</td>
</tr>
<tr>
<td>7</td>
<td>A₂ B₁</td>
<td>12</td>
<td>0.13</td>
<td>0.22</td>
<td>0.05</td>
<td>NORMAL</td>
</tr>
<tr>
<td>8</td>
<td>A₂ B₂</td>
<td>12</td>
<td>0.14</td>
<td>0.22</td>
<td>0.05</td>
<td>NORMAL</td>
</tr>
</tbody>
</table>

2. Homogeneity

After analyzing the normality of the sample distribution, the researcher analyzes the homogeneity of the data. The following is the analysis of the data homogeneity (Appendix 12).

Table 4.10 Data homogeneity

<table>
<thead>
<tr>
<th>NO</th>
<th>X₁</th>
<th>X₁²</th>
<th>X₂</th>
<th>X₂²</th>
<th>X₃</th>
<th>X₃²</th>
<th>X₄</th>
<th>X₄²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>35</td>
<td>1225</td>
<td>23</td>
<td>529</td>
<td>25</td>
<td>625</td>
<td>27</td>
<td>729</td>
</tr>
<tr>
<td>2</td>
<td>34</td>
<td>1156</td>
<td>22</td>
<td>484</td>
<td>25</td>
<td>625</td>
<td>26</td>
<td>676</td>
</tr>
<tr>
<td>3</td>
<td>33</td>
<td>1089</td>
<td>22</td>
<td>484</td>
<td>24</td>
<td>576</td>
<td>25</td>
<td>625</td>
</tr>
<tr>
<td>4</td>
<td>32</td>
<td>1024</td>
<td>21</td>
<td>441</td>
<td>24</td>
<td>576</td>
<td>24</td>
<td>576</td>
</tr>
<tr>
<td>5</td>
<td>30</td>
<td>900</td>
<td>20</td>
<td>400</td>
<td>23</td>
<td>529</td>
<td>24</td>
<td>576</td>
</tr>
</tbody>
</table>
Because \( \chi^2(6.718808) \) is lower than \( \chi^2_{.05}(7.84) \), it can be concluded that the data are homogeneous.

### C. Hypothesis Testing

#### 1. ANOVA Test (Multifactor of Variance)

Testing hypothesis can be done after the data are normal and homogeneous through normality and homogeneity test. Furthermore, the data analysis must be conducted systematically in order that the result of the analysis is scientifically accepted. This analysis is meant to answer the problems as follows: (1) Is Total Physical Response more effective than Grammar Translation Method to teach vocabulary to the Fourth grade students of SDN 1 Tegaldowo in the academic year of 2011/2012? ; (2) Do the students who have high interest have better vocabulary mastery than those who have low interest of the fourth grade students of SDN 1 tegaldowo in the academic year of 2011/2012? ; (3) Is there an interaction between teaching methods and learning interest to teach vocabulary to the fourth grade students of SDN 1 Tegaldowo in the academic year of 2011/2012?
To answer the above problems, the researcher analyzes the data using multifactor analysis of variance (Appendix 13).

**Table 4.11** The summary of a 2 X 2 multifactor analysis of variance

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>SS</th>
<th>Df</th>
<th>MS</th>
<th>$F_0$</th>
<th>$F_{(0.05)}$</th>
<th>$F_{(0.01)}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Columns (Methods)</td>
<td>63.02083</td>
<td>1</td>
<td>63.02083</td>
<td><strong>8.521127</strong></td>
<td>4.00</td>
<td><strong>7.08</strong></td>
</tr>
<tr>
<td>Between Rows (Learning Interest)</td>
<td>143.5208</td>
<td>1</td>
<td>143.5208</td>
<td><strong>19.40563</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Columns by rows (interaction)</td>
<td>391.0208</td>
<td>1</td>
<td>391.0208</td>
<td><strong>52.87042</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>597.5625</td>
<td>3</td>
<td>199.1875</td>
<td><strong>26.93239</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td>325.4167</td>
<td>44</td>
<td>7.395833</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>922.9792</td>
<td>47</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on the summary of a 2 X 2 Multifactor Analysis of variance, it can be concluded that:

1) $F_0$ between columns (8.52) is higher that $F_t (4.00)$ at the level of significance ($\alpha$) = 0.05 and $F_t (7.08)$ at the level of significance ($\alpha$) = 0.01, so the difference between columns is significant, and therefore the null hypothesis which states that there is no difference between TPR and GTM to teach vocabulary is rejected. It can be concluded that teaching vocabulary using TPR to the second semester students of SDN 1 Tegaldowo is significantly different from the one using GTM. The mean score of students who are taught using TPR (24.50) is higher than the mean score of students who are taught using GTM (22.21). It means that teaching vocabulary using TPR is more
effective than the one using GTM for the second semester students of SDN 1 Tegaldowo.

2) $F_o$ between rows (19.40) is higher than $F_t$ (4.00) at the level at the level of significance ($\alpha$) = 0.05 and $F_t$ (7.08) at the level of significance ($\alpha$) = 0.01, so the difference between rows is significant, and therefore the null hypothesis which states that there is no difference between students having high learning interest and students having low learning interest is rejected. It can be concluded that the achievement of students who have high and those who have low learning interest are significantly different. The mean score of students having high learning interest (25.08) is higher than the mean score of those having low learning interest (21.63). It means that the vocabulary achievement of the students having high learning interest is better than the one of those having low learning interest.

3) $F_o$ interaction (52.87) is higher than $F_t$ (4.00) at the level of significance ($\alpha$) = 0.05 and $F_t$ (7.08) at the level of significance ($\alpha$) = 0.01, so there is interaction between the two variables, and therefore the null hypothesis which states that there is no interaction between teaching methods and learning interest in teaching vocabulary is rejected, the teaching methods and learning interest to teach vocabulary. In other words, it can be said that the effect of teaching methods on the student’s vocabulary mastery depends on the student’s degree of learning interest.
2. Tuckey Test

After using multifactor analysis of variance, the researcher analyzes the data using Tuckey test. The following is analysis of the data using Tuckey test (Appendix 14).

Table 4.12 The summary of Tuckey test

<table>
<thead>
<tr>
<th>No</th>
<th>Data</th>
<th>$q_0$</th>
<th>$q_t$</th>
<th>0.05</th>
<th>0.01</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>$A_1$ and $A_2$</td>
<td>4.12</td>
<td></td>
<td>2.92</td>
<td>3.96</td>
<td>Significant</td>
</tr>
<tr>
<td>2.</td>
<td>$B_1$ and $B_2$</td>
<td>6.22</td>
<td></td>
<td>2.92</td>
<td>3.96</td>
<td>Significant</td>
</tr>
<tr>
<td>3.</td>
<td>$A_1B_1$ and $A_2B_1$</td>
<td>10.19</td>
<td></td>
<td>3.08</td>
<td>4.32</td>
<td>Significant</td>
</tr>
<tr>
<td>4.</td>
<td>$A_1B_2$ and $A_2B_2$</td>
<td>4.35</td>
<td></td>
<td>3.08</td>
<td>4.32</td>
<td>Significant</td>
</tr>
</tbody>
</table>

a. TPR is compared with GTM

$$q = \frac{\bar{X}_{c1} - \bar{X}_{c2}}{\sqrt{\text{error variance}}/n} = \frac{24.50 - 22.21}{\sqrt{7.3958/24}} = \frac{2.29}{0.55512} = 4.13$$

From the computation above, it can be concluded that $q_0$ (4.13) is higher than $q_t$ (2.92) at the level of significance $\alpha = 0.05$

b. Students having high learning interest are compared with students having low learning interest

$$q = \frac{\bar{X}_{r1} - \bar{X}_{r2}}{\sqrt{\text{error variance}}/n} = \frac{25.08 - 21.63}{\sqrt{7.3958/24}} = \frac{3.45}{0.55512} = 6.23$$

commit to user
From the computation above, it can be concluded that \( q_o \) (6.23) is higher than \( q_t \) (2.92) at the level of significance \( \alpha = 0.05 \)

c. TPR is compared with GTM for the students having high learning interest.

\[
q = \frac{\bar{X}_{c1r1} - \bar{X}_{c2r1}}{\sqrt{\frac{\text{error variance}}{n}}}
= \frac{29.08 - 21.08}{\sqrt{\frac{7.3958}{12}}}
= \frac{8}{0.78506}
= 10.19
\]

From the computation above, it can be concluded that \( q_o \) (10.19) between columns (HI) is higher than \( q_t \) (3.08) at the level of significance \( \alpha = 0.05 \)

d. TPR is compared with GTM for the students having low learning interest.

\[
q = \frac{\bar{X}_{c1r2} - \bar{X}_{c2r2}}{\sqrt{\frac{\text{error variance}}{n}}}
\text{or } q = \frac{\bar{X}_{c2r2} - \bar{X}_{c1r2}}{\sqrt{\frac{\text{error variance}}{n}}}
= \frac{23.33 - 19.91}{\sqrt{\frac{7.3958}{12}}}
= \frac{3.416}{0.78506}
= 4.35
\]

From the computation above, it can be concluded that \( q_o \) (LI) (4.35) is higher than \( q_t \) (3.08) at the level of significance \( \alpha = 0.05 \)

From the summary of Tuckey test, it can be concluded that:

1. Because \( q_o \) between columns (4.12) is higher than \( q_t \) (3.08) at the level of significance \( (\alpha) = 0.05 \), the difference between columns is significant. It can be concluded that teaching vocabulary using TPR to the second semester students of SDN 1 Tegaldowo significantly differs from teaching vocabulary using GTM.

The mean score of students taught using TPR (24.50) is higher than one of those
taught using GTM (22.21). It means that teaching vocabulary using TPR method to the second semester students of SDN 1 Tegaldowo is more effective than the one using GTM.

2. Because $q_o$ between rows (6.22) is higher than $q_t$ (2.92) at the level of significance $(\alpha) = 0.05$, the difference between rows is significant. It can be concluded that the difference between the students having high learning interest and those having low learning interest is significant. The mean score of students who have high learning interest (25.08) is higher than that of the students who have low learning interest (21.63). It means that the students having high learning interest have better achievement than those who have low learning interest.

3. Because $q_o$ between columns (HI) (10.19) is higher than $q_t$ (3.08) at the level of significance $(\alpha) = 0.05$, the difference between cells is significant. It can be concluded that the vocabulary mastery of students with high learning interest who are taught using TPR is different from that of those who are taught using GTM. The mean score of the students having high learning interest taught using TPR (29.08) is higher than that of those having high learning interest taught using GTM (22.21). It can be concluded that teaching vocabulary using TPR to the students having high learning interest is more effective than using GTM.

4. Because $q_o$ between columns (LI) (4.35) is higher than $q_t$ (3.08) at the level of significance $(\alpha) = 0.05$, the difference between using TPR and GTM for teaching vocabulary to the students having low learning interest is significant. The mean
score of the students having low learning interest taught using TPR (19.91) is lower than that of those having low learning interest taught using GTM (23.33). It can be concluded that teaching vocabulary using GTM to the students having low learning interest is more effective than those having low learning interest taught using TPR.

5. Based on the result of point 3 and 4, TPR is more effective to teach vocabulary than GTM for students having high learning interest and GTM is more effective to teach vocabulary than TPR for students having low learning interest, it can be concluded that there is an interaction between the teaching methods and the student’s learning interest in teaching vocabulary.

D. Discussion of the Findings

Based on the research finding, it can be explained as follows:

1. Total Physical Response is more effective than Grammar Translation Method in teaching vocabulary. It can be observed from the value of $F_0$ which is greater than $F_1$ at the level of significance $\alpha = 0.05$. Based on the mean scores of vocabulary, the students who are taught by Total Physical response is 24.50 while those who are taught by Grammar Translation Method is 22.21. It means that Total Physical Response is better than Grammar Translation Method to teach vocabulary.

TPR is a language learning method based on the coordination of speech and action. It consists of a short sequence of instruction which is acted out. It
consists of a short sequence of instruction which is acted out. In Total Physical Response, command is very important. The commands are given to get students to perform an action. The action makes the meaning of command clear as the students learn more and more of the target language, a longer series of connected commands can be given, which together comprise a whole procedure of Total Physical Response. Furthermore, the students can easily master and memorize new words, each student shows their enthusiasm in learning process and they are much interested in learning vocabulary. In TPR, command is very important. The commands are given to get students to perform an action. The action makes the meaning of command clear. As the students learn more and more of the target language, a longer series of connected commands can be given, which together comprise a whole procedure of TPR (Larsen and Freeman, 2000: 116).

Otherwise, GTM is a classical method, focusing on grammatical rules, memorization of vocabulary, translation of text, and doing exercises. This technique is very boring and monotonous. The students will feel uninterested in lesson being taught by the teacher so it makes them lazy to study and join the class. Prator and Celce – Murcia in Brown (1979: 3) state that there are some major characteristics of Grammar translation Method, namely: (1) classes are taught in the mother tongue, with little active use the target language; (2) much of vocabulary is taught in the form of lists of isolated words; (3) long, elaborate explanations of the intricacies of grammar given; and (4) grammar provides the
rules for putting words together and instruction often focuses on the form and inflection of words. In teaching vocabulary by using GTM, students tend to focus on the translation of words based on dictionary usage, less consider about their application in real life. Therefore, TPR is more effective than GTM to teach vocabulary.

2. The students who have high learning interest have better vocabulary mastery than those who have low learning interest. It can be observed from the value of $F_o$ which is greater than $F_t$ at the level of significance $\alpha = 0.05$. Based on the mean score of the vocabulary, the students having high learning interest have 25.08 whereas those having low learning interest have 21.63. It means that the students having high learning interest have better vocabulary mastery than those having low learning interest.

It is known that the students who have high learning interest have better vocabulary achievement than those who have low learning interest. Students who have high learning interest are always active, creative, curious, having good participation in the teaching and learning process. They have their own spirit and motivation to study for getting their best competency and skill, otherwise, because of their curiosity; they like to have a challenging activity in learning vocabulary. According to Hurlock (1983: 420), the interest will add enjoyment to any activity that the individual engages in. If students are interested in an activity, the experiences will be far more enjoyable than if they are bored. Students’
interest toward learning English is very important. Their learning interest influences their achievement in learning English.

On the other hand, students having low learning interest are indicated, such as: individualistic, unconfident, irresponsible, lack of leadership, and subjective, thinking. The students with low learning interest are reluctant to participate in the teaching and learning process during the class session. They lazily involve in the class discussion. They do not have enough intention in learning vocabulary. According to Markshefels (1969: 73) states interest is something that implies or motivates the learner to strive for a particular goal. That is why they cannot improve their lack of vocabulary optimally. Thus, it can be concluded that the students having high learning interest have better vocabulary achievement than those having low learning interest.

3. There is an interaction between teaching methods and students’ learning interest in teaching vocabulary. The interaction can be observed from the value of $F_o$ which is greater than $F_t$ at the level of significance $\alpha = 0.05$. It can be concluded that there is an interdependence of students’ vocabulary mastery toward teaching methods and students’ learning interest.

TPR is more effective than GTM to teach vocabulary for the students having high learning interest. Teaching method is important in teaching learning process. Method which is used by the teacher in the class has a big influence for making the teaching learning process run well and successful. In teaching
vocabulary, the teacher has to use the appropriate and suitable method to make
the students more interested and have motivation to learn and join the teaching
learning process. In Total Physical Response, the teacher combines between
speaking activity and direct action. The teacher introduces how to pronounce and
spell in a good manner through speaking activity. She introduces meaning using
direct action.

Richard and Rogers (2001: 73) states Total Physical Response (TPR) is a
language teaching method built around the coordination of speech and action.
Asher (1977: 64) notes that children in learning their first language appear to do
a lot of listening before they speak, and that their listening is accompanied by
physical response. Meanwhile, Vale and Feunteun (1998: 39) state that TPR is
based on short sequence of instruction or descriptions which are acted out,
involving lots of physical response.

Students who have high learning interest are those who get involved
enthusiastically in all teaching activities, curious in teacher’s explanation, and
giving full attention while teaching and learning process. Elliot and friends
(2000: 349) state that interest occurs when a student’s needs, capacities and skills
are good match for the demands offered by particular activity. The application of
TPR in the vocabulary class can arouse the student’s learning interest. So it can
be stated that Total Physical Response is more appropriate to teach for students
who have high learning interest.
GTM is more effective than TPR for students having low interest. GTM is focused on learning grammar rules and their application in translating texts from one language into the other. Vocabulary is presented mainly through direct translation from the native language and memorization. Prator and Celce-Murcia in Brown (1979: 3) state that GTM is a classical method, focusing on grammatical rules, memorization of vocabulary, translation of text, and doing written exercises.

The students who have low learning interest have some characteristics, such as: individualistic, unconfident, irresponsible, lack of leadership, and subjective thinking. They tend to regard that the easier way in mastering a set of English words and their roles are by translating them into their mother tongue. The students tend to focus on the meaning of each word and memorize them personally rather than its application in real life. The students’ involvement in the learning process depends on their willingness to understand the subject of the lesson. The students with low learning interest do not see effort as related to achievement. Students who have low learning interest in a subject learn less effectively than students who are engaged (Fischer & Horstendahl, 1997). Therefore, GTM is more effective than TPR method to teach vocabulary for the students who have low learning interest.

Thus, it can be concluded that there is interaction between teaching methods and students’ interest for teaching vocabulary.
CHAPTER V
CONCLUSION, IMPLICATION AND SUGGESTION

A. Conclusion

Based on the previous description on the data analysis, the writer can state the findings are as follows:

1. Total Physical Response is more effective than Grammar Translation Method to teach vocabulary for the fourth grade students of SDN 1 Tegaldowo in the academic year of 2011/2012.

2. The students having high learning interest have better vocabulary mastery than those having low learning interest for the fourth students of SDN 1 Tegaldowo in the academic year of 2011/2012.

3. There is an interaction between teaching methods and learning interest in teaching vocabulary for the fourth grade students of SDN 1 Tegaldowo in the academic year of 2011/2012. TPR is more effective to teach than GTM to teach vocabulary for students having high learning interest and GTM is more effective than TPR to teach vocabulary for students having low learning interest.

Based on the findings, it can be concluded that the TPR is effective teaching method for teaching vocabulary to the second semester students of SDN 1 Tegaldowo in the academic year 2011/2012. Moreover, it has also been proved that there is interaction between teaching methods and students’ learning interest. It
implies that TPR is able to attract the students to be more active in the teaching and learning process and also their capability in mastering the vocabulary.

B. Implication

The result of the research implies that Total Physical Response is a very effective teaching method to teach vocabulary for the fourth grade students of SDN 1 Tegaldowo.

The application of Total Physical Response during classroom activities gives a greater effect than the application of Grammar Translation Method. It can be seen that the students are encouraged to be actively involved in every activity. They have to explore learning materials through various kinds of resources. They have to be able to speaks and tells from their own experiences. Moreover, they have to explain what they had learned with other students during the teaching learning activities. It means that the students were not passive. So, the students were able to acquire the material more easily and comprehend the concepts and materials more deeply.

The implementation of TPR and GTM depends on the students’ learning interest. Students with high learning interest need a challenging learning method and TPR method is the appropriate one. The active students will work with this method. Meanwhile, students with low learning interest find the pleasure and the ease in learning process when they are taught using GTM, therefore, GTM is suitable used to teach the students with low learning interest. In the implication of the method for
both, students with high and low learning interest in a class, it is better for the teacher to combine both methods in purpose to avoid students’ boredom and elaborate students’ learning interest in a variety of ways.

C. Suggestion

Based on the result of the research, some suggestions are given to the teacher, students, and future researcher as follows:

1. For teachers

Teachers can use Total Physical Response to teach vocabulary to improve student’s vocabulary mastery. The teachers ought to consider that learning interest is one of factors that affect the student’s vocabulary mastery in the teaching and learning process. Teachers should always encourage students to get involved actively in a teaching learning process, especially for students having low learning interest who tend to be passively engaged in the English class. Teachers should establish a good atmosphere to stimulate students to have fun in the process of teaching and learning, so it will be easy for the students to follow the English lesson. So, the teachers should be creative to find or modify teaching method which is suitable for students’ needs.

2. For students

The students are expected to be more active in the teaching and learning process in order to improve their vocabulary mastery. It is suggested for students who have low mastery in vocabulary to be more active in joining the teaching and learning process in the classroom.
3. For other researchers

For other researchers who are interested to conduct the research in more detail to know the effect of Total Physical Response in teaching vocabulary, the writer hopes that these research findings can be used as a starting point and also as a reference for the future researches. Moreover, other researchers may conduct other researches to know the effectiveness of Total Physical Response viewed from other psychological aspect such as motivation, language intelligence, creative etc. It is hoped that the further result of the research can support and complete this research.