

## **Using PowerPoint Program in Improving Students' Vocabulary Mastery**

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### **Abstract**

This research investigates to know whether the PowerPoint program applied in teaching vocabulary and how whether student's vocabulary development at 12<sup>th</sup> grade of SMA Al-Husna Kota Tangerang in academic year 2014/2015. The writer collected the data from 40 students spread in two group, experimental and controlled group by applying quasi experimental design. The populations are students of 12<sup>th</sup> Grade of SMA Al-Husna Kota Tangerang consists of 60 students, XII IPA and XII IPS. The data is gathered through pretest and posttest, the result of the research shows that the hypothesis, which states null hypothesis is rejected. It means that there is significant difference of teaching students' vocabulary mastery both classes and teaching vocabulary by using PowerPoint program would be better and more effective than teaching students' vocabulary without PowerPoint program at 12<sup>th</sup> grade of SMA Al-Husna Kota Tangerang in academic year 2014/2015.

Keywords : PowerPoint Program, Vocabulary Mastery

### **INTRODUCTION**

The teacher of 21 century should shed adopt the innovative teaching technique such as communication technology (Ramachandran, 2015). Communication technology seems to be defining the future of our whole world in many ways. Technological revolution has transformed many aspects of our life, including how we communicate. We can define language a system of conventional vocal sign by means of which human beings communicate especially in English and one of technology revolution is Microsoft PowerPoint program (Schmaltz, 2014). According to Santrock, one of teaching strategies for helping children pay attention in learning is use media and technology effectively as part of effort to vary the pace of the classroom and focus on active learning to make learning enjoyable (Santrock, 2001). The teacher plays a key role in determining not only how but how well technologies are used in classrooms, and thus the extent to which technologies improve student performance. Given the central importance of teachers in the application of technologies for teaching and learning, education policy makers must quickly turn their attention to teachers: their readiness and how best to prepare them to use the technology infrastructure policy makers have been working so hard to create it (Siddiqui, 2014).

Based on the background of the problem, students tend to forget and bored English, especially vocabulary because of monotonous method of teaching. Many methods can develop student's achievement in vocabulary; one of them is using PowerPoint program because it doesn't only make learning process more interesting but also to make learning process easier. From the statement above writer can be formulated of problems as follow: 1) How is the PowerPoint program applied in teaching vocabulary mastery at 12<sup>th</sup> grade of SMA Al-Husna Kota Tangerang in academic year 2014/2015?; 2) How are student's vocabulary developments at 12<sup>th</sup> grade of SMA Al-Husna Kota Tangerang in academic year 2014/2015? and the

aims of the research are: 1) To know how is the PowerPoint program applied in teaching vocabulary mastery at 12<sup>th</sup> grade of SMA Al-Husna Kota Tangerang in academic year 2014/2015. 2) To know how are student's vocabulary development at 12<sup>th</sup> grade of SMA Al-Husna Kota Tangerang in academic year 2014/2015. In this research the writer submits hypothesis by seeing how big the average score of experimental class (MX) toward controlled class (MY) as follow:  $H_o : r_{xy} = 0$ , there is no significant influence between increasing vocabulary mastery by using PowerPoint program at 12<sup>th</sup> grade of SMA Al-Husna Kota Tangerang in academic year 2014/2015. It means that students taught by using PowerPoint program does not get more significant effectiveness increasing in average score than students taught by any other method.  $H_a : r_{xy} \neq 0$ , there is significant influence between increasing vocabulary mastery by using PowerPoint program at 12<sup>th</sup> grade of SMA Al-Husna Kota Tangerang in academic year 2014/2015. It means that students taught by using PowerPoint program get more significant effectiveness increasing in average score than students taught by any other method.

Microsoft PowerPoint is a developed by Microsoft; it is part of the Microsoft Office system and runs on Microsoft Windows and the computer operating systems. The window version and run in Linux operating system, under the wine compatibility layer and a program is "a list of instructions that the computer must follow in order to process data into information" (Williams, *et all.*1995). The instruction consists of statements written in a programming language. PowerPoint is widely used by instructors, business people, education, students and educationalist and is among the most prevalent forms of persuasive technology beginning with Microsoft Office 2003. Microsoft revised the branding to emphasize PowerPoint's place within the Office suite, calling it Microsoft Office PowerPoint instead of just Microsoft PowerPoint. The current versions are Microsoft Office PowerPoint 2007 for window and 2008 for Mac (Wales, 2014).

## 1. PowerPoint Program

### 1.1 History of PowerPoint

Microsoft Office PowerPoint was originally developed by Bob Gaskins and software developer Dennis Austin under the name presenter for forethought. PowerPoint 1.0 for apple Macintosh in April 1987. It ran in black and white, generating text and graphics pages for overhead transparencies. A new full color version of PowerPoint shipped a year later after the first color Macintosh came to market. Microsoft Corporation purchased pares thought and it is PowerPoint software product for \$ 14 million on July 31, 1987. In 1990, the first windows versions were produced for window 3.0 since 1990; PowerPoint has been included in Microsoft Office suite of applications except for the basic editions of the suite.

### 1.2 PowerPoint Operation

PowerPoint presentations consist of a number of individual pages or 'slides'. The 'slides' analogy is a reference to the slide projector, a device that has become absolute due to the use of PowerPoint and other presentation software, slide contain text, graphics, movies, and other objects, which may be arranged freely on the slide, PowerPoint, however, facilitates the use of a consistent style in a presentation using a template or 'slide master'. The presentation can be printed or displayed live on a computer and navigated through at the command of the presenter. For larger audiences the computer display is often projected using video projector. Slide can also form the basis of web casts.

### 1.3 PowerPoint as Communication

PowerPoint is a tool of communication media in learning, true, early application of PowerPoint program were in the area of English language, but the scope and range of PowerPoint application has been drastically extended, and the use of PowerPoint program as a number cruncher may be only of secondary importance to the English teacher. How English teacher might use the PowerPoint program in the classroom or in the production of instructional materials for the classroom, depend on a large extend on our goals, objectives and needs. It is not surprising that in intelligent tool like the PowerPoint program as media can be of use to a teacher, but what may be surprising is that the tool can be used to meet a wide variety of instructional purposes and PowerPoint as presentation program has become something common in human life. More and more people use PowerPoint, not only for business presentation but also for education matters. This computerized system has made human life easier.

Information and communication media such as PowerPoint program is part of computer program gives contribution in education, one of them is computer for basic vocabulary learning process:

...the application of computer technology with the class to ensure that the purpose of the application is understood... A program which teaches basic vocabulary to first or second graders might be completely inappropriate for students in senior high school ...(Vaidya, 2002).

#### 1.4 PowerPoint as Instructional Games

A PowerPoint program which requires the application of one or more skills or concepts to problem in which competition, strategy and random events are significant factors. Many people are more familiar with the use of PowerPoint as a game rather than its use in instruction. Arcade and video games are well known for their ability to engage and had held the attention of youngsters.

#### 1.5 PowerPoint as Material

##### Production

It is hard to project how much written and visual material is prepared by the "typical" science teacher; but when resources are available there are doubts that preparing materials for instructional purposes can be a major task for an instructor. The computer can make this task much more manageable and professional. Word processing; science educators, as well as any educator, find that using a computer for writing a whole spectrum of papers is a great aid.

## 2. The Meaning of Vocabulary

Vocabulary as one of the language aspects is supposed to be learnt when people are learning a language. Good mastery of vocabulary is important for anyone who learns a language. A learner of foreign language will speak fluently and accurately, write easily, or understand what he reads or hears if he has enough vocabulary and has a capability of using it accurately.

According to Vygotsky in Scott Thornbury's book, vocabulary is a word and a word is a microcosm of human consciousness (Thornbury, 2001). And in Nation's book Vocabulary is taught in connection with other language activities. Richards, J. C, said that vocabulary is core component of language proficiency and provides much of the basis for how well learners speak, listen, read, and write. Another definition is stated by Scott Thornbury that vocabulary is a more complex phenomenon than a first it might appear.

The statement above means that vocabulary is a means of communication with others. Others will understand us better when we know a lot of vocabulary.

### 2.1 The Techniques in Teaching Vocabulary

In presenting the meaning of the words to students, Nation suggests four possible techniques to ease the comprehension of a word by students. The following are techniques in teaching English vocabulary that can be implemented in the class; 1) Demonstration Technique, demonstration technique is a vocabulary teaching technique that is associated with what is often called the “direct method”. When we define words by demonstration we try to show their meaning without using other words. The presentation can be done by using an object, using a cut- out figure, gesture, simple actions, photographs, blackboard drawing or diagrams, or by sing simple pictures from books. This kind of definition is useful especially as a beginning for: object in the classroom, object which can easily be brought into the classroom, colors, certain actions which are easy to identify (e.g., catch, throw), and certain adverbs (slowly, quickly, loudly, and softly); 2) Analytical Definition, in this sort of definition we try to find the most important ideas which the word contains. We examine the different parts or elements of meaning of the word. When we look at the elements of meaning of the word, we say that we analyze the word-that is, take it to pieces to find out what it is made of. So this kind of definition is called and analytical definition. For example, a thing is simple if it is unmixed, or not divided into parts, or has a very few parts, or is nit highly developed, or it is very easy to learn to do; 3) Contextual definition, this kind of definition is particularly useful because people can acquire meaning for formerly meaningless from other words that they see and hear at or about the same time as the new word. A contextual definition does not directly explain the meaning of a word but encourages learners to make an effort and find out the meaning by seeing how the word is used (its grammar) and with what other words it is associated. Mentioning typical examples is one type of contextual definition. The learners have to work as well because they have to try to find out what examples given have in common. For example: A dog, an elephant, a bird, a snake are animals; and 4) Translation Technique, this kind of definition maybe used to save time, if the concepts in English and the learners’ mother tongue are the same. If it is used very much it will reduce the learner’s experience of English in the class, and it will encourage them to make false equations between concepts in English and in their mother tongue (Nation, 1990).

## **RESEARCH METHOD**

### 1. Research Design

In this research, the writer used quasi experimental design, it is to compare the result of two groups between experimental and controlled class. The writer used PowerPoint program as media to teach the experimental class and without PowerPoint when teaching the controlled class. The research was conducted at SMA AL-HusnaTangerang. It is located at Jl. A. Damyati No. 43-45 Sukasari, Kota Tangerang. The writer conducted the research on August until December 2014. Population is the whole research subject at 12<sup>th</sup> grade of SMA Al-Husna Kota Tangerang in academic year 2014/2015 there are 60 students that are put into 2 classes, science class and social class and writer took 40 students as a sample, from science class consists of 20 students as experimental class and social class consists of 20 students as controlled class. Vocabulary test one of the instrument writer chosen and PowerPoint slide one of

instrument the writer used, it consists matching the word, fill in the blank, trans search and the last crossword.

## 2. Collecting of the Data

There are three kinds in data collection such as observation, interview and test. 1) Observation technique is the main technique in collecting the data about the use of PowerPoint Program in teaching vocabulary in a Physical classroom during the teaching-learning process. It deals with the activities of the English teacher in presenting English materials to the students. The observation conducted to observe English teaching-learning process in the real English classroom activities at 12<sup>th</sup> grade of SMA Al-Husna Kota Tangerang in academic year 2014/2015; 2) Interview, the interview for the English teacher was aimed to get the concept of using some technique in teaching vocabulary. It includes the problems faced by the teacher and the students in learning process; 3) Test, The vocabulary pre-test and post-test are divided into 4 items in 20 questions that is 5 question from matching the word, 5 question from fill the blank, 5 question from Tran search and the last 5 question from crossword. Before giving vocabulary post-test the writer applied by using crossword puzzles as media through PowerPoint program by her in experimental class, to make sure that the PowerPoint is applied well.

## 3. Data Analysis

After collecting data, the writer qualified it based on its kind. To analysis data the writer uses two approaches. Those are logical approach for qualitative data and statistical procedure for quantitative data. Because the writer want to compare result of the research between experimental class and controlled class, so the steps as follows: 1) Quantification of the data, the data from the result of the test qualified such as vocabulary pre-test and post-test; 2) Analyzed by statistic. The writer analyzed the data in the form of investigating student's worksheets given and describes score in table, determine mean, standard deviation and hypothesis testing.

## RESULTS AND DISCUSSION

The students in experimental class obtained mean score 72.2 for pre-test and 96.6 for post-test. The students in controlled class obtained mean score 74 for pre-test and 94.6 for post-test. After getting the data from the post-test score of the two classes, then the writer analyzed it by using t-test formula:

Table 1. The Calculation of Experimental and Controlled Class

No	X <sub>1</sub>	X <sub>2</sub>	x <sub>1</sub>	x <sub>2</sub>	x <sub>1</sub> <sup>2</sup>	x <sub>2</sub> <sup>2</sup>
1	100	92	3,4	2,4	11,56	5,76
2	100	80	3,4	- 9,6	11,56	92,16
3	96	84	- 0,6	- 5,6	0,36	31,36
4	96	100	- 0,6	10,4	0,36	108,16
5	92	72	- 4,6	- 17,6	21,16	309,76
6	92	88	- 4,6	- 1,6	21,16	2,56
7	100	92	3,4	2,4	11,56	5,76
8	84	84	- 12,6	- 5,6	158,76	31,36
9	100	92	3,4	2,4	11,56	5,76
10	96	92	- 0,6	2,4	0,36	5,76
11	100	84	3,4	- 5,6	11,56	31,36
12	96	84	- 0,6	- 5,6	0,36	31,36
13	92	96	- 4,6	6,4	21,16	40,96
14	92	84	- 4,6	- 5,6	21,16	31,36
15	96	88	- 0,6	- 1,6	0,36	2,56
16	100	100	3,4	10,4	11,56	108,16

17	100	92	3,4	2,4	11,56	5,76
18	100	96	3,4	6,4	11,56	40,96
19	100	100	3,4	10,4	11,56	108,16
20	100	92	3,4	2,4	11,56	5,76
$\sum X_1 = 1932$		$\sum X_2 = 1792$	$\sum x_1 = 0$	$\sum x_2 = 0$	$\sum x_1^2 = 360,74$	$\sum x_2^2 = 1004,8$

From the table above, the writer got the data  $\sum X_1 = 1932$   $\sum X_2 = 1792$   $\sum x_1 = 0$   $\sum x_2 = 0$   $\sum x_1^2 = 360,74$   $\sum x_2^2 = 1004,8$ , whereas N1 and N2 are 20. After that, the writer calculated them based on the t-test formula and hypothesis testing to prove it, the data obtained from the experimental class and controlled class are calculated with assumption as follow: If  $t_o > t_t$ : the alternative hypothesis is accepted. It means that there is significant difference of teaching vocabulary between using PowerPoint program and using PowerPoint program. If  $t_o < t_t$ : null hypothesis is rejected. It means that there is no significant difference of teaching vocabulary between using PowerPoint program and without using PowerPoint program.

From the result of calculation above, the value of  $t_o$  is 3.70. The degree of freedom ( $df$ ) was 38. The writer used the degree of significance of 5%. The writer used  $df = 40$  for there is no degree of significance of 5% is 2.02 And for 1% is 2.70. After get the data, the writer compared it with  $t_t$  both in degree of significance 5% and 1%; therefore  $t_o : t_t = 3,70 > 2,02$  in degree of significance 5% and  $t_o : t_t = 3,70 > 2,70$  in degree of significance 1%. It means that  $H_a$  (alternative hypothesis) of research is accepted and  $H_o$  (null hypothesis) is rejected.

From the result of research, the mean of pre-test score obtained by experimental class 72.2 was lower than controlled class 74. The highest score of pre-test both classes was 100. The lowest score of pre-test in experimental class was 44 and controlled class was 40. The mean of post-test score in experimental class = 96.6 was greater than in controlled class = 89.6. The highest score of post-test in both classes reached to 100. The lowest score in experimental class was 84, while controlled class was 72.

## CONCLUSION

From the result of research, mean of pre-test score obtained by students in experimental class 72.2 was lower than in controlled class 74. The highest score of pre-test both classes was 100. The lowest score of pre-test in experimental class was 44 and controlled class was 40 so, the distribution of scores in experimental class lower than controlled class. The mean of post-test score in experimental class = 96,6 was greater than in controlled class = 89,6. The highest score of post-test in both classes reached to 100. The lowest score in experimental class was 84, while controlled class was 72. From the interpretation above, the writer said that the effect of teaching vocabulary by using PowerPoint program to increase student's vocabulary mastery 12<sup>th</sup> grade of SMA Al-Husna Kota Tangerang in academic year 2014/2015 would be better and more effective than teaching vocabulary without using PowerPoint program.

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