

CHAPTER I

INTRODUCTION

1.1 Background of Study

"Without grammar very little can be conveyed; without vocabulary nothing can be conveyed". D.A. Wilkins, Linguistics in Language Teaching-Edward Arnold, 1972.

Vocabulary is one of the most difficult parts for students when learning a language especially a foreign language. There are many reasons which make it difficult for students to learn vocabularies. The difficulties come from the teachers who teach their students or from the students who lose their interest in learning vocabularies. Christina Vanvlodorp [accessed on July 2nd, 2007, available at: <http://uk-online.uni-koeln.de/cgi-bin/show.pl/>] said that this kind of situation mainly happen because of missing motivation of most students in learning vocabularies.

Furthermore, in a country where English is spoken as a foreign language, learning vocabularies usually takes place in class. In view of the time given by their school to learn English, it is difficult for teachers to see the development of their students' vocabulary mastery and to give them motivation to study. Because of that, vocabulary test is needed. Yet, giving vocabulary test to students does not really increase their motivation. There

should be another way not only to teach vocabularies to students but also to motivate them.

Playing game is one way to work out the problem. Game encourages, entertains, teaches and promotes fluency. At least game is used to show students the beauty of foreign language not just a problem that at times seem overwhelming, [Agnieszka Uberman, accessed on July 2nd, 2007, available at <http://exchanges.state.gov/forum/>]

Game is also proposed by William J. Walton available at www.theescapist.com accessed on January 2007 to be used in learning activities. He explained that First, *game is developmental*. RPG (Role Playing Game) titled *Lineage II : The Chaotic of Chronicle* for example, players need to create their own character by putting a name until history of the character. When writing character's history, players must create setting, plot, and character's origin. In this case, not only writing skill is being developed, but also the creativity.

Second, *game is educational*. By playing game, we can learn not only about the use of language but also history, geography, current event, theology, management and math (Walton; 1999). Third, *game is social*. There are no gaming "loners" or "outcasts". By games we easily interact with other gamers. And the last is *game is fun*. Computer based game is completed by both audio and visual. Because of that, gamers can put themselves through game played and can possibly implicate their feeling

too. Happiness, sadness, strained and proud is collapsed to be fun activity to make gamers bear to spend their time in front of their computers. Something that we learn with fun is memorized for long-terms.

Another researcher who uses games to learn vocabulary is Rolf Palmberg, Senior Lecturer in ELF Methodology at Åbo Academy (Department of Teacher Education) in Finland, his research is entitled *Computer games and foreign-language vocabulary learning* (available at www.teflgames.com/why.html).

Meanwhile, Gairns and Redman (1986), accessed on September 25th, 2007, available at www.asian-efl-journal.com, suggested the following types of vocabulary presentation techniques: *Visual technique*, this refers to visual memory, which is considered especially helpful with vocabulary maintenance. Those who learn by using visual aids remember better the material than those who do not (Zebrowska 1975:452). *Verbal explanation*, This pertains to the use of illustrative situations, synonymy, opposites, scales (Gairns and Redman 1986:74), definition (Nation 1990:58) and categories (Allen and Valette 1972:116).

From the statements above, one computer-based detective game, entitled; *Nancy Drew: The Creature of Kapu Cave*, is used in this study, since this game is equipped with visual and verbal explanation. This game is given to respondents as a tool to learn vocabularies. Afterward, the study

searches the effectiveness of playing game to respondents' development in mastering vocabularies.

Based on the previous research and theories mentioned above, this study aimed to seek the effectiveness of playing computer-based detective game in students' vocabulary mastery.

1.2 The Scope of Study

This study investigated only the effect of playing computer-based detective games on vocabulary mastery of senior high-school students. One of computer-based detective games was chosen as a tool of learning vocabularies. The title of game is *Nancy Drew: The Creature of Kapu Cave* developed by *HeR Interactive*.

1.3 Research Questions

This study aimed to answer these following questions:

1. Can a computer-based detective game develop vocabulary mastery of senior high school students?
2. Is the effect of playing a computer-based detective game significant to students' vocabulary mastery?

1.4 Aims of Study

Associated with the research questions above, this study is proposed to analyze the effect of playing computer-based detective games on vocabulary mastery of senior high-school students'. In addition, the significance of the effect to students' development in mastering vocabulary is investigated.

1.5 Research Method

Below, there are methods used in this research. This explains the design of the research which is used, the instruments which are used to gain the data, the data collected, procedure of the study, and how to analyze data.

1.5.1 Research Design

Quantitative method was used in this study, since there were two main tracks of approaches to this study; gathering and comparing the data. In addition, by interviewing respondents, comprehensive information of the data taken were served.

Both of methods were held in experimental study using intact group design. There were two classes divided; experimental class and control class. Both classes were tested by pre-test and post-test. Before giving post-test, the game was given to experimental class. Afterwards, the taken data from experimental

class and control class were compared and analyzed to find out its significance.

1.5.2 Research Instruments

This study used two kinds of instrument. The first is vocabulary test 1 as a pre-test. This test comprises 30 items of multiple choice questions which were developed based on the syllabus. This test was applied to both classes; experimental and control.

Second is vocabulary test 2 as a post-test. This test comprises 30 items of multiple choice questions. This test was applied to both classes after the treatment given to experimental class. In addition, interview was used to gain comprehensive data from the respondents.

1.5.3 Data Collection

In collecting the data, tests were given to both classes before and after the experiment held, so that vocabulary scores of both classes were identified. The data were taken along with this study during regular schedule of English in school.

The data from game were taken to compose vocabulary test as *pre-test* and *post-test*. Furthermore, the secondary data from formal statistic of students' scores were collected from the teacher who teaches English in both classes.

Meanwhile, the steps are showed below in the Procedure of Study.

1.5.4 Procedure of Study

Below are the procedures of this study:

1. Collecting respondents.
2. Clustering respondents into experimental and control classes.
3. Pre-testing both classes with the instruments (vocabularies test 1.)
4. Giving treatment to experimental class.
5. Post-testing both classes with the instruments (vocabularies test 2.)
6. Comparing the data by using *t-test* in order to seek out whether the effect is significant or not.
7. Concluding the study.

1.5.5 Data Analysis

This study was started with the null hypothesis, since this is comparative study, so that in mastering vocabulary the two groups are considered similar in the beginning.

$$H_0: \mu_1 = \mu_2$$

Gerald Kranzler and Janet Moursund (1999) proposed the meaning of null hypothesis that there is no difference between experimental and control classes in the *mean* adjustment level. The

analysis of this study used *t-test* as the approach. It is primary proposed to determine whether the *means* of scores of the two groups are different to a statically-significant degree (Gerald Kranzler and Janet Moursund ch.7: 89.)

$$\left(\frac{G_1(\text{experiment})}{G_2(\text{control})} \middle| \frac{T_1 \times T_2}{T_1 \times T_2} \right)$$

Notes : *G* stands for class, *T*₁ stands for Pre-test and *T*₂ stands for Post-test

The result of the data was completed with the interview analysis in order to gain comprehensive information from the data taken.

1.6 Populations and Samples

Students of SMK 4 Padalarang were chosen as the subject for this study. For the reason that SMK 4 Padalarang is a school which provides computer-skilled program, it is believed that students are able to operate computer. The program itself is named TKJ (*Teknik Komputer Jaringan*).

The study was focused on the first grade students of TKJ. Only one class was analyzed as experimental class and one class was served as control class. Both experimental and control classes were selected by giving them *pre-test*. It is believed that both experimental and control classes have

similar level in mastering English vocabularies, because they are in the same class on the same school.

As presented previously, the selected population is first grade students of SMK 4 Padalarang which were clustered in order to select two classes conducted; experimental class and control class. Both classes were chosen by using clustered random sampling.

1.7 Clarification of Terms

Visual Technique : one of the methods in learning activities providing visual object as a tool of learning.

Verbal Explanation : giving context or clue to discussed point by using written and spoken languages.

t-test : an approach to determine whether the *means* of the two groups of score differ to a statically-significant degree.

Null hypothesis : starting hypothesis that proposed equality in adjustment level.

1.8 Organization of the Paper

Chapter 1 Introduction

This chapter contains the background of study, the scope of study, the research questions, the aims of study, the research method, the clarification of terms and the organization of the paper.

Chapter 2 Theoretical Review

This chapter includes foundation of theories that support the study.

Chapter 3 Methodology

This chapter provides the application of the research, based on the methodology that was explained previously in chapter one.

Chapter 4 Analysis and Discussions

The result found at chapter three is analyzed and discussed in this chapter.

Chapter 5 Conclusions and Suggestions

The conclusions and suggestions of this study are served in this chapter.