

**AN INVESTIGATION ON THE USE OF COMPUTER TO LEARN  
ENGLISH LANGUAGE VOCABULARY: A CASE STUDY OF  
FORM FOUR STUDENTS IN A SUB-URBAN SCHOOL IN  
KUCHING SARAWAK**

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*Dedicated to*

*My beloved husband Dr. Mohd Haizal Bin Mohd Nor, whose patience, support and love  
helped me through this thesis.*

*Our two sons Muhammad Amirul Hafiz, Muhammad Amirul Harith and our daughter  
Maisarah Hanis Balqis who suffered from my long absence at their very young ages...*

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## **ABSTRACT**

This study was carried out to investigate the benefits of using computer in sub-urban secondary school in Kuching, Sarawak. The main focuses in this study include three aspects namely, the attitudes, motivation and the performance towards the use of computer to learn English language vocabulary. This study was conducted on 50 respondents who are form four student in a secondary school in Kuching, Sarawak. The instruments used in this research are vocabulary test and questionnaires. Overall, the results of this study showed that students have good attitude and were very motivated to learn English language vocabulary using computer. They have shown their confidence and are motivated to learn English language vocabulary as they have basic computer knowledge. The good performance could be measured after analysing and comparing their results in the pre-test and post-test. They have shown better results in the post-test compared with the pre test after being exposed to the computer program. Based on this study, it can be said that firstly, using computer to learn English language vocabulary is very beneficial and created self-confidence and motivated students. Secondly, students have positive attitudes and motivation towards the use of computer to learn English language vocabulary and can improve their performance in English Language. Thirdly, students have exposure with the interactive computer program. These program have encouraged them to learn English language vocabulary effectively as compared to before being exposed to them.

## ABSTRAK

Kajian ini telah dijalankan bagi mengkaji kebaikan penggunaan komputer bagi pembelajaran perkataan Bahasa Inggeris di sekolah menengah. Fokus utama adalah di bahagian pinggir Bandar sekolah menengah di Bandar Kuching, Sarawak. Kajian ini terbahagi kepada tiga aspek yang merangkumi kebaikan pembelajaran perkataan Bahasa Inggeris berbantuan komputer terhadap sikap, motivasi serta pencapaian para pelajar selepas menggunakan komputer. Kajian ini telah dijalankan ke atas 50 orang pelajar-pelajar tingkatan empat sains dan sastera, Sekolah Menengah Kebangsaan Bako, Kuching, Sarawak. Instrumen kajian ini terbahagi kepada dua iaitu Ujian perkataan dan borang soal selidik. Keseluruhannya, hasil kajian ini menunjukkan bahawa pelajar-pelajar lebih bersemangat serta lebih bermotivasi untuk belajar melalui komputer. Pencapaian bagi ujian perkataan juga menunjukkan pelajar-pelajar telah mendapat keputusan yang lebih baik selepas mereka didedahkan dengan pelbagai program komputer. Ini adalah lebih mudah disebabkan mereka mempunyai pengetahuan asas tentang komputer. Mereka juga telah menunjukkan sikap yang positif di dalam pembelajaran perkataan Bahasa Inggeris berbantuan komputer. Berdasarkan kajian ini terbukti bahawa, pertama, pembelajaran perkataan Bahasa Inggeris berbantuan komputer mempunyai banyak kebaikan terutama dalam membentuk sikap para pelajar supaya lebih bersemangat, berkeyakinan serta bermotivasi di dalam pembelajaran mereka, kedua, para pelajar lebih bersikap positif dan yakin bahawa belajar perkataan Bahasa Inggeris berbantuan komputer dapat meningkatkan kemahiran mereka di dalam Bahasa Inggeris dan ketiga, setelah didedahkan dengan pelbagai program komputer ini akan menggalakkan mereka untuk belajar perkataan Bahasa Inggeris dengan lebih efektif berbanding dengan sebelum ini.

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# CHAPTER 1

## INTRODUCTION

### 1.0 Introduction

Educators have always been creative in their attempts to apply new technologies in their methods. There have been many examples of prominent uses of the language laboratory, radio cassettes, video and television in language teaching. In this 21<sup>st</sup> century, the computer technology provides a new learning environment with a wealth of pedagogic possibilities.

Vision 2020, a blueprint for setting the direction and pace for national development and the rapid advancement of information technology worldwide, have spurred investments in implementing the Multimedia Super Corridor (MSC) in our country (Ahmad Sarji Abdul Hamid, 1993). One of the flagship applications in the MSC is the Smart School project. Our former Prime Minister, Tun Dr. Mahathir Mohammad stressed that the MSC's Smart School initiative is a response to the need for Malaysia to make the critical transition from an industrial economy to a knowledge-based one. This calls for a technologically literate workforce who is well able to perform in a global environment and use Information-Aged tools and technology to improve productivity (Mahathir Mohamad, 1998). Subsequently, computers have become one major deciding factor in the successful transformation from an industrial economy to a knowledge-based one.

## 1.1 Background of the Study

In the Malaysian educational system, the application of computer in classroom learning is still relatively new. However, at present there is a higher utilization of the computer in the educational field. This is probably due to the decrease in computer price and the availability of personal computers in various formats and sizes. The uses of the personal computer are now apparent in the technical subjects, languages, and science and also in humanities due to its capabilities to be programmed for interactive activities. These interactive abilities enable two-way communication between the user and the computer (Kenning & Kenning 1983). The users are able to learn and get feedback almost immediately. The demand for computer spreads over the field of business to education. As claimed by Allesi and Trolip (1991), the potential of computer as the latest and most advanced technology in education is far more effective than the traditional method of teaching and learning. The computer is considered as an important medium in attaining knowledge. Without the computer, one seems to be lost in the quest for knowledge. By using the computer, knowledge can be acquired efficiently and effectively. Even a decade ago, it was declared that of all the new media and new technologies, it was the computer that was attracting most attention (Anderson, 1986).

Computer Assisted Language Learning (CALL) is the use of computer as part of a language course. According to the *Longman Dictionary of Applied Linguistics, (2000)* cited in Richards, (1985), CALL includes a sequential teaching program where the students respond to the computer and it reacts in giving feedback to indicate the responses are either correct or wrong. The computer is also used to monitor students' progress and to direct them into appropriate lessons and materials. It is also a learning source to assist students to learn the language at their own pace and ability. The computer if properly applied can be an effective tool to help language learners. According to McDonough and Shaw (2003), a knowledge and understanding of English language vocabulary is often considered to be an integral part of a reader's overall competence in a foreign or second language and the explicit teaching of vocabulary has enjoyed something of a revival in recent years. During the last decade language teachers have

been able to benefit from the exponential growth in computer generated corpora, which has provided information about word frequency and how these words can be used in a range of spoken and written situations.

Many studies that have been conducted show that learners who use CALL in vocabulary learning demonstrate better comprehension of what they read than those who are not (Ahmad et al: 1985, Wyatt: 1984, Fox: 1990). CALL is one of the latest modern aids in language learning. Future language classroom will utilize this technology and this will transpire in Malaysian language classroom too. Many studies among others Supyan (1994) and Meinhof (1990) (cited in Norizan Abdul Razak, 1998) reported the effectiveness of CALL to teach language skills such as vocabulary, reading and writing. The reality is many students have problems in writing essays due to their lack of vocabulary. Most of them have the ideas on what to write but they cannot progress because they do not have rich vocabulary on how to write in the target language.

Recent years have shown an explosion of interest in using computers for language teaching and learning. A decade ago, the use of computers in the language classroom was a concern only to a small number of specialists (Warschauer, M., & Healey, D., 1998). However, the great existence of the use of computers nowadays cannot be denied at all. This is because, we cannot fail to notice that computers are all around us; they are permeating every aspect of our existence, sometimes subtly, sometimes less so.

Many doubt the educational value that computer technologies can offer. However, Kulik and Kulik (1991 cited in Noor Zainab A.R, 2005) reported significant achievement gains among learners using computers compared to others in conventional settings. It is evident that achieving success in the implementation of technologies is effective. Wyatt (1984) conducted an analysis on the effectiveness of CALL on French secondary school students and found that the students reacted positively to the technique. The students were highly enthusiastic and motivated when they learned the French language via computer. Many studies conducted showed that learners who use CALL in vocabulary

learning demonstrate better comprehension of what they read than those who are not (Ahmad et al: 1985, Wyatt: 1984).

In some earlier research on the effectiveness of CALL in teaching vocabulary skills such as the study of Huyen and Thornbury (2003), the focus was to identify whether CALL was an effective tool to enhance teaching vocabulary skills. The intention was to see if any strategies could be shared or taught to the teachers or students.

This study focused mainly on the pre-test and post-test results obtained by the experimental group in using computer in the classroom to learn English language vocabulary. It also analysed students' perceptions about their vocabulary learning process through the use of questionnaire.

## **1.2 Statement of the Problems**

One of the major problems faced by students in sub-urban or rural schools in learning English is their lack of vocabulary. According to Ratnawati and Ismail (2003), it is the students' lack of vocabulary that makes it difficult for them to understand or express themselves in English. They are unable to guess the meanings of words in context when they attempt reading tasks. As English has an extensive vocabulary and its vocabulary is really mind-boggling due to the discrepancies in terms of pronunciation and the inconsistency of the rules governing word meaning and word formation, most students studying English as a second language have difficulties in it. This really poses a challenge to English language teachers in teaching English vocabulary. There are many interesting ways to approach vocabulary in our classrooms and this study focussed on the use of computer in learning English language vocabulary.

The idea of using the computer strikes fear and dread into the hearts of many language teachers. This fear is due to many factors such as teachers' inadequate skills using the computer in teaching, psychological problems and physical constraints. This study also aimed to expose to the teachers how computers can be made as their best 'friend' to get a lot of ideas for their vocabulary teaching.

The students' lack of interest in learning a second language is due to several factors and one of them is due to the lack of activities done by teachers. Even though students realise the importance of vocabulary in English language learning, most of them learn vocabulary passively due to several factors. First, based on the researcher's own experience as a school teacher, the students consider the teacher's explanation for meaning and definition, pronunciation, spelling and grammatical functions as boring. In such a situation, language learners have nothing to do in a vocabulary learning section but to listen to their teacher. Second, students only think of vocabulary learning as knowing the primary meaning of new words. Therefore, they ignore all the other functions of the words. Third, students usually only acquire new vocabulary through new words in their textbooks or when given by teachers during classroom lessons. For example, learners find many new words in a text and then ask the teacher to explain their meaning and usages. Forth, many learners do not want to take risks in applying what they have learnt. Most students recognise a word in a written or spoken form and think that they already "know the word", but they might not be able to use that word properly in different contexts or pronounce it correctly. Fifth, most of the students are unable to express their ideas and points of view due to limited knowledge on vocabulary skills.

Students' potentials in language learning can easily be accessed by using technology in education (Allesi and Trollip, 1991). Computer can be a linguistic in format, game partner, and a means of getting information or even a drillmaster. Many studies conducted showed that learners who use CALL in vocabulary learning demonstrate better comprehension of what they read than those who are not (Ahmad et al: 1985, Wyatt: 1984). This study aims at addressing this problem using quantitative methods. It is concerned with the interactive activities from the computer language



program downloaded from the Internet to learn English language vocabulary in order to enhance a good learning environment in the classroom.

### **1.3 Objectives of the Study**

The objectives of this study are:

- 1.3.1 To identify the students' attitude towards using computer to learn English language vocabulary.
- 1.3.2 To investigate the students' motivation towards using computer to learn English language vocabulary.
- 1.3.3 To examine the students' performance when using computer to learn English language vocabulary.

### **1.4 Research Questions**

The research aims to address the following questions:

- 1.4.1 What are the students' attitudes towards using computer to learn English language vocabulary?
- 1.4.2 What are the students' motivations towards using computer to learn English language vocabulary?
- 1.4.3 What are the students' performances towards the use of computer to learn English language vocabulary?

### **1.5 Scope of the Study**

This study was carried out on the students of a secondary school in Bako, Sarawak. The respondents consisted of 50 Form Four students. The respondents were selected based on their English language proficiency level. The students chosen were those who obtained Grade C in the English language subject in their Peperiksaan

Menengah Rendah (PMR). This study investigated sub-urban students' attitudes, motivations and performance towards the use of computer to learn English language vocabulary.

## **1.6 Significance of the Study**

The purpose of this study is to determine the attitudes, motivation and performance of the students on the use of the computer to learn English language vocabulary. It has been crucial in producing an effective teaching and learning process in English language. The latest technology will enable the teachers to prepare and use the interactive and participative multimedia instructional materials. The students will also be using these technologies to seek and discover knowledge. Therefore, it is important that all teachers should be proficient in using information technology as a tool for teaching and learning. The teachers must be able to help students to help how to learn and how to use information technology effectively to access the vast resources available.

It is hoped that this study will be able to uncover some obstacles and barriers faced by the students in the process of acquiring the English language vocabulary through the use of computer. The needs of these students will be identified and recommendations on the types of activities to increase and support them can be made to the authority concerned.

## **1.7 Definition of Terms**

### **1.7.1 Computer Assisted Language Learning (CALL)**

Computer Assisted Language Learning (CALL) refers to the incorporation of computers and multimedia into language teaching with the belief that this can enhance language learning among the learners.

### **1.7.2 Computer Literacy**

A computer literate is someone who knows how to use or work with a computer. For example, know how to use a simple program like the Micro-soft Word.

### **1.7.3 Vocabulary**

“A set of lexemes, including single words, compound words and idioms” or knowledge in words and their meanings in a language. This knowledge is also applicable in other areas of language skills (Hennings, 1989).

### **1.7.4 CALL-Games**

Rule-based, competitive CALL activities, usually involving timing and visual display features in which the player must acquire and manipulate knowledge to succeed (Robert, 1987). In this study Word Zap was one of the computer games that had been used and the others were hangman and crossword puzzle. They were downloaded from the Internet.

### **1.7.5 Sub-urban**

School within a radius of 40 kilometres away from the Divisional Education Office (or Department) are considered sub-urban school (Sarawak State Education Department, 2001). This means that only schools that are located in Kuching town to a radius of 40 kilometres from Kuching Divisional Education Office will be categorized as sub-urban school.

### **1.7.6 Word Zap**

Word Zap is a program consisting of vocabulary games. In this program, students are given a chance to play the game by making words out of disorganized letter(s) provided. Their opponent can be either another person they challenge over the computer or the computer itself. In this study Word Zap was one of the program provided before the post-test.

### **1.7.7 Vocabulary Matching Exercises**

In this study, Vocabulary Matching Exercises are one of the computer program provided to the respondents to enhance their English language vocabulary before the post-test.

It is an interactive vocabulary software that involved matching exercises. Through this program, students could test their ability in vocabulary skills by matching the vocabulary items with the appropriate definitions or meanings.

### **1.7.8 Attitude**

Attitude is the way a person thinks or feels towards a situation or surroundings. Attitude is a learned behaviour and it is possible to change the negative behaviour to positive behaviour by increasing the motivational level of a student (Samsiah, 2004).

In this study, attitudes can be seen through the students' response or feedback in using computer towards learning English language vocabulary.

### **1.7.9 Motivation**

It is one of the key factors that influences the rate and success of second or foreign language learning. Motivation is associated with goal, effort and desire towards language learning (Gardner, 1985).

In this study motivation can be accessed based on students' reaction, behaviour and their effort to do the exercises in the computer program provided in this study.

### **1.7.10 Performance**

Rosenshine & Stevens (1986) define *performance*, which can provide information on accuracy of work and it may include corrective information.

In this study performance can be assessed based on the comparison between the pre-test and post-test results, whether the results remain, improve or lower than before.