CHAPTER 1

INTRODUCTION

1.0 Background to the study

In the computer world, invention is the mother of necessity.

(The Journal, 2007)

The rapid development of science and technology has resulted in many beneficial tools for the society. Computers are now widely used by people of all stages of life and more and more people are becoming computer literate. Most homes in the world today, especially in the developed nations, are equipped with at least one computer. This further proves the fact that computers are becoming a large part of life today. Both government and private sectors are using computers in various fields such as in banking, weather forecasting, traffic control, accounting and even in education.

Computer in education is not something new as it has existed for more than 40 years. However, back in the 1960s it was something very new and not many people had the skills to fully utilize computers. Thus, the effect of computers in education 40 years back was not evident as compared to now.

"There was a time when computers were a luxury item for American schools, but that time has clearly passed." -Bangert-Drowns, Kulik, and Kulik, 1985.

At present, computers play an important role in the education industry and many computer softwares are being introduced in schools and higher learning institutions to give students new techniques or approaches in learning. Technology in the classroom is

widely believed to help teachers promote a constructive class environment and it is considered by many researchers to have an influential effect on the teaching and learning process. Teachers, rely on computers to prepare the task sheets and to come up with various exercises to be used in the classroom. As a result, students get to do their tasks on time, fast and effectively. Computers act as a useful tool for information retrieval where they help students to obtain information for their project papers and other language learning purposes. Not only that; computers can also help learners improve their listening skills through audio sources and video sources. Computers give students the opportunity to benefit from material carefully designed or selected by the teacher .Thus, the role of computers in educating students is significant provided that they perform according to the exact instructions given to it by human users.

1.1 Computers in the Malaysian education system

The realization of computers in education in Malaysia is not new. However, it was not until late 1990's that a more rigorous effort to integrate computers in Malaysian educational system was made. In Malaysia, the importance of computer in education has been realized as a way to achieve the 2001-2010 Education Development Plan which is reported in the Pembangunan Pendidikan 2001-2010 (Kementerian Pendidikan Malaysia, 2001). The aim of Ministry of Education (MOE) to implement ICT in education is to educate students to become computer literate citizens, and to position ICT as a teaching and learning tool and to increase productivity, efficiency and effectiveness of the management system (Malaysia, 2000). The importance of ICT was stressed by the former Prime Minister, Tun Dr Mahathir Mohamad in 1991, that for a country to prosper, it is important for the citizens to be technologically informed. Therefore, the government has facilitated the integration of computers in school

education and the Ministry has been very generous in investing money to ensure that schools are well equipped with computers. A large amount of budget has been proposed by the government to initiate the infrastructure development and training needed to prepare students for the information age. In the 2002 budget, the government has proposed a sum of more than RM200 million for the computerization of schools. (Shamsiah Mohamed, 2003)

Recently the standard of English language has been an educational issue due to the drop of quality of students' English language in national examinations and the lack of proficiency among students. One of the ways to encourage students to learn English is to change the teaching and learning approach and one way is to use the computer as a tool in the classroom. The Ministry of Education in Malaysia hopes, as it was stated in the curricular guideline, that by making ESL integrated lessons, the level of English proficiency among students will increase as it is an alternative to the traditional way of learning.

1.1.1 Computer Assisted Language Learning

CALL (Computer Assisted Language Learning) is another strategy of learning a language which incorporates computers as a tutor. Levy (1997:1) defined CALL as "the search for and study of applications of the computer in language teaching and learning." CALL used to be known as CALI (Computer Assisted Language Instruction) which fell out of favour because the word 'instruction' is highly related with the traditional approach of teaching; teacher-centered classroom. Thus, the name CALL has been adopted to replace CALI. CALL has been accessible since the 1960's but it was not popularly used at that time as compared to now.

CALL is now one of the most significant areas of innovation in language education and is being widely used in educational institutions everywhere. According to Grimes (1977), CALL gives students a platform to learn a new language independently with minimal guidance from the teacher. When put under a CALL program, a student will correspond to the questions on his/her own and thus learn from mistakes made. Past researches have shown that CALL programs bring a lot of benefits to students, providing room for learners of English to learn the language themselves without much teacher interference. As a result, students get to explore the language on their own and learn from their mistakes. This is different from the typical classroom situation where students will be dependent on the teachers to spoon feed them with answers. This provides little opportunity to learn through the mistakes. It is apparent that the roles of teachers and students have changed with the presence of technology assisted learning.

CALL is also flexible in a number of ways. When a student is absent due to illness or personal problems, he/she still has a chance to access the program and gain full benefit from the program at a later time. On the contrary, this can be a difficult situation in a typical classroom where if a student is absent, he/she has to get the notes from his/her peers because the teacher would have done with the presentation of the lesson. A computer is designed in such a way that it does not tire and its attention does not falter.

CALL materials on a computer are also accessible from a distance and this adds on to the list of advantages of using CALL programs. For example, in Malaysia, a special university which is called University Tun Abdul Razak (UNITAR) or also known as Virtual Learning University has been established to provide ample opportunities for students to learn the courses from home. Students no longer need to go for classes to learn as they can do it at home from a computer. Hence, CALL is a beneficial creation of technology in the education field.

1.1.2 CALL in ELS

ELS is an English language centre that caters for all levels of students who want to learn English as a foreign language. Students who enrol in ELS come from various countries such as Korea, Japan, Libya, Sudan, Somalia, China, Thailand and Turkey. ELS is one of the most popular language centres in Malaysia. ELS Malaysia was established in 1990 and currently has 6 centres throughout Malaysia with 3 centres in Klang Valley.

All teachers of ELS have a degree in teaching English and have undergone special courses and training before they are allowed to teach. ELS offers courses such as CIEP (Certified Intensive English Program), CEP (Communicative English Program), IELTS, TOEFL, Business English and many others. ELS focuses on student centered activities, which is very different from teaching methods in schools. Thus, students who come to ELS will have a better opportunity to use the language and participate in the classroom. This enables the learners to learn the language in a very interesting way. A typical studying day in ELS consists of 5 hours of classroom learning and 1 hour of Multimedia learning where students are put under CALL software called NETPLUS. Students at ELS learn all skills everyday (Reading, Writing, Structure, Listening and Conversation) and each session has a period of a month. There are 10 levels altogether beginning from Level 100 - 109.

The NETPLUS program comes in 5 levels; Beginner, Pre Intermediate, Intermediate, Upper Intermediate and Business English. Students work with the program for about 1 hour everyday and get a chance to explore all the skills including pronunciation. Although the content of the software is not suited to the students' cultural background, it engages students in a very interesting way that can motivate them to learn. This program is user friendly too. Hence, even students who are computer illiterate can work on the software without much complication.

There are 40 lessons in each level of NETPLUS. The graphics and videos in this program are the plus points to enhance students' interest. Even though the students are supposed to finish one lesson each day, they are given the opportunity to work at their own pace to benefit from the program. NETPLUS program caters to students' needs and tests students in both receptive skills and productive skills. The content of the program is taken from a book by Pearson Education called "Reward" published in the year 1995 for learners of English as foreign language.

1.2 Objectives of the study

This study has got the following objectives to achieve:

- To evaluate the effectiveness of NETPLUS, in terms of its effectiveness as a tool for learning English as a foreign language.
- To determine if NETPLUS motivates students in ELS Language centre to learn English in a CALL environment.
- To identify attitude (positive or negative) shown by learners towards learning of English as a foreign language using the NETPLUS software.

1.3 Research Questions

Although there have been many positive comments on CALL overall throughout these years, the question on effectiveness of the CALL software used in this research which is NETPLUS, is yet to be answered. Therefore, the researcher would like to find out the extent to which the software has helped the learners in mastering grammar, vocabulary and reading comprehension.

As motivation plays an important role in order for learning to take place, the researcher also included motivation as one of the factors to study in this research. Specifically, the researcher sets out to see how CALL programs motivate students in the learning of English as a foreign language. Bradley (1982) notes that CALL programs highly motivate language learners. (See 2.7.1)

The success of language learning software also depends on the attitude of learners. Finkbeiner (2001) in a study of 100 undergraduate EFL learners' attitude and interest in CALL found that the learners had positive attitudes towards CALL Thus, in this research the attitude of learners while working on NETPLUS is also another research question. Based on all these factors, the researcher has come up with three research questions and hopes to obtain the answers to these questions by the end of this research.

1. How effective is NETPLUS, a commercial CALL software, for the learning of English as a foreign language?
2. Does the CALL software used in this research, NETPLUS; motivate students to learn English as a foreign language?
3. What types of attitude (positive or negative) are shown by the students towards learning of English using NETPLUS?

1.4 Statement of the problem

Systematic evaluation of the effectiveness of all aspects of CALL must continue; however, new focuses as well as methods of research inquiry will need to be developed if we are to gauge correctly the power of the computer to affect different aspects of second language acquisition.

(Dunkel, 1991)

Language learning institutions and educational institutions are opting to incorporate computers in their syllabuses to enhance students' performance. This shift from traditional method of teaching to computer teaching and learning happens due to the advancement of the field of ICT (Information and Communications Technology). However, the questions on the efficacy of the new method always arise and whether or not the students are ready to adapt themselves to this new strategy is always a question mark. This study hopes to shed some light in this area specifically to answer the existing questions on the effectiveness of CALL.

According to Dunkel (1991), based on past researches, the results obtained were mixed, often showing no significant difference, sometimes favouring the computer users and occasionally favouring the traditional approaches. Through this study, the researcher hopes to know if there are any significant differences in learners' performance when they are learning through computers. This study hopes to measure the effectiveness of the CALL software used to teach the learners who are in the beginner's level.

Students often get frustrated during the learning process if they don't find the lesson presented interesting enough, Garcia, M R & Arias, F. V. (2000). Students will be naturally motivated to learn and participate if the lesson is interesting. To make the lesson as interesting as possible, educators have to come up with many ways and strategies to boost the students' motivation. However, this is not applicable to computer

assisted learning because the lesson will be presented on the computer and students will have to work on their own to understand what is being presented. How motivated the students are while they are working on computers is a question the researcher would like to respond to at the end of the study.

1.5 Research Methodology

In this study, qualitative and quantitative data were collected via tests, questionnaires and interviews. In this research, the researcher employs several methods in order to obtain the information needed. To answer research question 1, the researcher collected data through tests given to the subjects of this study after each session in CALL/Non CALL environment. A placement test had been carried out to determine the students' level of proficiency before they were placed into the program. Subjects of this study work on the NETPLUS program for 14 hours, which will cover 14 lessons and sit for a test after each lesson. This process will be further elaborated in Chapter 3. The researcher felt that having just quantitative data would not be sufficient for this study. The researcher wanted to get feedback from the students to provide rich data that will give the researcher insights into students' motivation and attitude when working in a CALL environment vs. Non CALL environment. Thus to answer research question 2 and 3, questionnaires and interviews were given.

Two sets of questionnaires were given to the same groups of students. Questionnaire 1 which focused on the students' background and computer literacy was given at the beginning of the study while Questionnaire 2 that aimed to seek answers pertaining motivation level of students was given at the end of the study. The questionnaires given are in simple form and there are no open ended questions given because of the students' limited vocabulary.

Interviews with both teachers and students were conducted in order to answer research question 3. Two teachers who have been working in the lab for more than 2 years and ten students who were randomly picked from the test groups were interviewed. With all these methods, the researcher hopes to gather more concrete data for this study.

1.6 Limitations of the study

This study has several limitations. First of all, the research will be done over a period of a month only. The reason it is only done for a month is because students are expected to complete each level in one month. Upon completion, they will move on to the next level if they pass or they will have to repeat the same level again if they fail. Thus, all the data for this research has to be collected within one month. In this period of one month, students are expected to do twenty hours of CALL lessons. However, due to some external factors such as late enrolment, registration day, examination days and graduation day, the research covered only fourteen hours of CALL.

The second limitation is that, this research only looked at one particular software of CALL which is NETPLUS. Typical CALL softwares present a stimulus to which the learner must respond. The stimulus may be presented in any combination of text, still images, sound, and motion video. Just like other CALL softwares, NETPLUS also possess the same features. Since the students from level 101 to 106 in ELS work in the Multimedia Lab using the NETPLUS program, it is the only program available to do the research on. Therefore, the findings of this study focused on the effectiveness of one of the CALL softwares which is NETPLUS program and may not apply to other CALL programs or software.

The third limitation of this study would be the proficiency level of the students. This study will be conducted on students of very low proficiency level. Students at this level possess very limited prior knowledge of the language which makes all of them homogenous. Thus, the results tabulated were based on their understanding of the program during their self learning period and not based on their prior knowledge. Due to time constraint, the researcher was able to only focus on one group of learners, the lower proficiency group. Since this research focused on only the lower proficiency group, the effectiveness of CALL cannot be generalized to all ESL/EFL learners.

One of the limitations is that there is no quantitative data collected for research questions 2 and 3. For the purposes of this study, the researcher carrying out a preliminary study on NETPLUS felt that getting qualitative data in the form of student feedback was richer data compared to quantitative data. This is a research gap that perhaps can be filled by future research.

1.7 Definition and Terminology

It will be helpful to look at some definitions of CAI and other kinds of learning activities involving computers before understanding this study to make sense of the array of terms used by educators and researchers. As Kulik, Kulik, and Bangert-Drowns point out in their 1985 research summary, "the terminology in the area is open to dispute" (p. 59). The following definitions are a synthesis of those offered by Bangert-Drowns, et al. (1985), Batey (1987), Grimes (1977), Samson et al. (1986), and Stennett (1985), and represent commonly accepted definitions of these terms:

- **Computer-assisted instruction (CAI) -** A narrower term and most often refers to drill-and-practice, tutorial, or simulation activities offered either by themselves or as supplements to traditional, teacher directed instruction.
- **Computer-based education (CBE) and computer-based instruction (CBI)** - Broadest terms refer to virtually any kind of computer use in educational settings, including drill and practice, tutorials, simulations, instructional management, supplementary exercises, programming, database development, writing using word processors, and other applications. These terms may refer either to stand-alone computer learning activities or to computer activities which reinforce material introduced and taught by teachers.
- **Computer-managed instruction (CMI) -** Refer either to the use of computers by school staff to organize student data and make instructional decisions or to activities in which the computer evaluates students' test performance, guides them to appropriate instructional resources, and keeps records of their progress.
- **Computer-enriched instruction (CEI) -** Learning activities in which computers (1) generate data at the students' request to illustrate relationships in models of social or physical reality, (2) execute programs developed by the students, or (3) provide general enrichment in relatively unstructured exercises designed to stimulate and motivate students.
- **Information and Communications Technology (ICT) -** An umbrella term that includes any communication device or application, encompassing: radio, television, cellular phones, computer and network hardware and software, satellite systems and so on, as well as the various services and applications associated with them, such as videoconferencing and distance learning.

- **World Wide Web(WWW) -** An approach to language teaching and learning in which computer technology is used as an aid to the presentation, reinforcement and assessment of material to be learned, usually including a substantial interactive element
- **MML (Multimedia Lab) –** A place where students work on selected programs on computers for one hour everyday in ELS language centres.
- **NETPLUS –** A special program or software designed for ELS language centres based on a book called Reward by Simon Greenal.