UNIVERSITI TEKNOLOGI MARA KOTA SAMARAHAN



TEACHERS' PERCEPTION TOWARDS COMPUTER ASSISTED LANGUAGE LEARNING AND STUDENT PERFORMANCE AMONG PRIMARY SCHOOL STUDENTS

WENNEDY DANNY B.Ed. (Hons) TESL APRIL 2004

ACKNOWLEDGEMENTS

I would like to extend my gratitude and thanks to the following people who have made their contribution to the successful completion of this Academic Writing:

Mr. Bromeley Philip, my supervisor, who has put in a great deal of effort and time in guiding and helping me in the writing of this academic writing. Thank you for your time, patience, support, vital guidance and suggestions throughout my writing. It has been a terrific learning experience.

Mdm. Sharifah Aishah, Coordinator for the TESL UITM all the English Language lecturers of UITM who have assisted me in one way or another, my gratitude for all that you have done.

To all my fellow primary school teachers around Kuching; for your time spent in completing the questionnaire.

My most sincere gratitude to all my course-mates, thank you for your support, encouragement and friendship throughout this course.

To my loving and understanding wife, Sandy Wong Lai Kee, thank you for your continuous encouragement, understanding, patience and love. To my sons, Dexter Jared and Darrell Keith, thank you your understanding and your patience.

ii

ABSTRACT

The purpose of this study is to look into the teachers' perception towards computer assisted language learning and student reading performance among primary school students. Our government has embarked on an intensive effort to introduce the use of Information Communication Technologies (ICTs) and has spent millions on equipping schools with computers in the hope that Malaysian students will have early exposure and will be computer savvy as we move into the era of information technology. Schools play important roles in ascertaining that our young citizens are computer literates. Since reading is one of the language skills which face major problem, the Education Ministry and the public sectors are creating reading courseware to be used by the teachers and students in acquiring reading at the earlier stage. A total of 40 primary school teachers teaching English from around Kuching area were involved in this study. Survey questionnaires were used to collect data for the study. The questionnaires were distributed personally by the researcher to the respondents. The questionnaires contain three important sets of data; demographic data of the respondents, the measure of CALL literacy levels, and the measure of students' performance levels. The data collected were analyzed using the Statistical Package for Social Sciences (SPSS) which were converted into tables. The findings of this study showed no significant relationship between CALL literacy and students' performance in the perceptions among primary school teachers. Efforts to increase CALL literacy level may not produce corresponding effect on students' performance. Primary school management should be aware that to increase students' performance, there might be a need to improve other factors such as student's attitude, school culture, and learning environment as well.

ABSTRAK

Tujuan kaji selidik ini dijalankan adalah untuk mengenalpasti persepsi guru-guru terhadap pembelajaran bahasa dengan bantuan komputer serta prestasi bacaan dikalangan pelajar-pelajar di sekolah rendah. Kerajaan telah berusaha memperkenalkan penggunaan Teknoloai Komunikasi Maklumat dengan jitu serta berbelanja berjuta-juta ringgit untuk membekalkan komputer-konputer ke sekolah-sekolah dengan tujuan pelajar-pelajar diperkenalkan di peringkat awal serta akan menjadi pengguna komputer yang berkebolehan disamping kita menuju ke era teknologi maklumat. Sekolah juga memainkan peranan penting dalam membentuk generasi muda menjadi celik komputer, searus dengan di negara kita. Memandangkan membaca merupkan kemahiran penting dalam kemahiran berbahasa yang mengalami masalah, Kementerian Pendidikan serta sector awam telah mereka bahan bacaan 'courseware' yang boleh digunakan oleh guru-guru serta pelajar-pelajar untuk menguasai berkemahiran membaca dari peringkat yang lebih muda. Seramai 40 gurur-guru sekolah rendah yang mengajar Bahasa Inggeris di sekitar Bandar Kuching yang terlibat dalam kajian tersebut. Seramai 40 orang guru sekolah rendah yang mengajar Inggeris dari sekitar kawasan Kuching yang terlibat dalam soal selidik ini. Borang Soal Selidik telah diedar kepada responden secara peribadi. Borang Soal Selidik tersebut mengandungi tiga set maklumat yang penting iaitu; latar belakang responden, tahap literasi CALL, dan tahap prestasi pelajar-pelajar Maklumat yang dikumpul dianalisa dengan menggunakan 'Statistical Package for Social Sciences (SPSS)' yang ditukar kepada 'table'. Dapatan daripada kajian menunjukkan tiada hubungan ketara diantara literasi CALL dan perstasi pelajar-pelajar mengikut persepsi para guru. Usaha untuk meningkatkan Literasi CALL mungkin tidak menghasilkan prestasi pelajar yang sewajarnya. Pihak sekolah mesti menyedari untuk meningkat

prestasi pelajar, kemungkinan factor-faktor lain seperti perangai pelajar, budaya sekolah dan termasuk suasana persekeliling.

TABLE OF CONTENTS

TITLE PAGE	
LETTER OF APPROVAL	i
AKCNOWLEDGEMENTS	ii
ABSTRACT	iii
ABSTAK	iv
TABLE OF CONTENTS	vi
LIST OF TABLES	ix
LIST OF GRAPHS	x

CHAPTER ONE : INTRODUCTION

1.1	Introduction	1
1.2	Background	1
1.3	Statement of the Problem	3
1.4	Research Questions	6
1.5	Hypotheses	6
1.6	Significance of the Study	7
1.7	Definition of Terms	8
	1.7.1 CALL Literacy	8
	1.7.2 CALL Literacy Levels	9
	1.7.3 Student Performance	9
	1.7.4 Teachers	10
	1.7.5 Frequency of CALL Program Attended	10
	1.7.6 Amount of Time of CALL Program Attended	10
	1.7.7 Accessibility of CALL Program	11
1.8	Delimitations of the Study	11
1.9	Conclusion	12

Page

CHAPTER TWO : LITERATURE REVIEW

2.1	Introd	uction	13
2.2	E-lear	ning in CALL program	13
	2.2.1	CALL Program in Malaysia	13
	2.2.2	Relevant CALL Research Done in Other Countries	15
2.3	Readii	ng Skill	18
	2.3.1	The Importance of Reading	18
	2.3.2	Reading Improves Writing and Prediction Skills	19
2.4	CALL I	Literacy	20
2.5	Stude	nts' Performance	21
	2.5.1	Factors Contributing To Students Performance	22
	2.5.2	Objective-Centred Approach	23
	2.5.3	The Formal and Informal Measurement	24
	2.5.4	Students' Performance in The Study	24
2.6	Relatio	onship between CALL literacy and Students' Performance	26
2.7	Differe	ences in CALL literacy and Students' performance Levels Based	
	on De	mographic Factors	27
	2.7.1	CALL Literacy and Frequency of CALL Program Attended	27
	2.7.2	CALL Literacy and Amount Time of CALL Program Attended	28
	2.7.3	CALL Literacy and Accessibility to CALL Program	29
	2.7.4	Students' Performance and Frequency of CALL Program Attended	30
	2.7.5	Students' performance and Amount Time of CALL Program	
		Attended	30
	2.7.6	Students' Performance and Accessibility to CALL Program	31
2.8	Conclu	usion	32
CHAI	PTER TI	IREE : METHODOLOGY	
3.1	Introd	uction	33
3.2	Resea	rch Design	33
3.3	Resea	rch Location	34
3.4	The R	espondents	34
3.5	The R	esearch Instrument	34
3.6	Pilot Test 3		35

3.6Pilot Test353.7Data Collection Procedure36

Data A	nalysis Procedure	36
3.8.1	CALL Literacy Level	36
3.8.2	Students' performance Level	37
3.8.3	Data Analysis	38
Conclu	sion	38
	3.8.1 3.8.2 3.8.3	Data Analysis Procedure3.8.1CALL Literacy Level3.8.2Students' performance Level3.8.3Data AnalysisConclusion

CHAPTER FOUR : FINDINGS

4.1	Introduction	39
4.2	Teacher Perception on Students' CALL Literacy Level in Reading	39
4.3	Teacher Perceptions on Students' Performance Level in Reading	41
4.4	Relationship between CALL Literacy and Student Performance	43
4.5	Conclusion	44

CHAPTER FIVE : DISCUSSIONS AND CONCLUSIONS

Apper	ndix A	Questionnaire	57
APPE	NDIXE	S	
BIBLI	OGRA	РНҮ	55
5.7	Conclu	usion	53
5.6	Recom	nmendations	52
5.5	Limita	tion of the Study	51
5.4	Implic	ations of the Study	50
	5.3.3	Relationship between CALL Literacy and Students' Performance	48
	5.3.2	Students' Performance Levels	48
	5.3.1	CALL Literacy Levels	46
5.3	Discus	sion	46
5.2	A sum	mary of the finding	45
5.1	Introd	uction	45

viii

LIST OF TABLES

Table	Title	Page
Table 3.1	Distribution of CALL Literacy Scores and their Levels	37
Table 3.2	Distribution of Students' performance Scores and their Levels	38
Table 4.1	Distribution of Respondents by CALL Literacy Levels	40
Table 4.2	Distribution of Respondents by Students' Performance Level	42

LIST OF GRAPHS

Graph	Title	Page
Graph 4.1	Teachers Perception Towards Students CALL Literacy	41
Graph 4.2	Teachers' Perceptions Towards Students Performance Levels	43

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This chapter introduces the background of the study, follows with the statement of the problems, research questions, hypotheses, theoretical framework, definition of the terms, significance of the study and the limitations of the study.

1.2 Background

We are moving rapidly into an era of information technology. It is obvious that computer is taking over a lot of task and they have proven to be more accurate, efficient and faster than human. Nowadays with the improvements in the quality and efficiency, and refinements in computers and software, there has been a decrease in its cost making it now more affordable and accessible for most of us. The computer by itself has many capabilities for enhancing language learning but combined with other technologies such as audio, video, frequencies and phone lines, and satellite dishes the possibilities are even greater for the second language learner. Computers have become an essential tool in our society. Early exposure to computers may help students gain the CALL literacy that will be crucial for future success in the workplace. Access to computers at school and at home

allows students to retrieve information, manipulate data, and produce results efficiently and in innovative ways (NCES, 1999a, p.64).

There is general agreement that reading is essential to success in our society. The ability to read is highly valued and important for social and economic advancement (Snow, Burns & Griffin, 1998). The agreement supports the belief that reading is fundamental. Most children learn to read fairly well. However, there are children in Malaysia whose educational concerns are at risk because they do not read well enough to ensure understanding or to meet the demands of an increasingly competitive economy and changing demographics. Not all students are learning to read as well as they should. Many of them are experiencing serious difficulty in learning to read, and as they progress through they continue to lag in reading achievement. The reading problems of Malaysian students are not new. Obviously, students will need much support in learning to read and in using reading as a tool for learning (Snow, Burns, & Griffin, 1998).

Reading is one of the important skills in language learning besides listening, speaking and writing. According to Krashen (1982) reading will lead to language acquisition, provided that certain preconditions are met. These include adequate exposure to the language, interesting material and a relaxed, tension-free learning environment.

Learning to read using computers will definitely be more interesting because computer program software include audio, visual, and textual information about the language. Learning to read assisted by computers are much more fun. It draws the interest of children and it is no longer dominated by traditional method of listening to the teachers' monotonous reading. Children will look forward to their reading lessons as computers provide interesting animation, attractive and colourful visuals, sounds and lessons are much more enjoyable as compared to the chalk and talk teaching method.

1.3 Statement of the Problem

The Malaysian government has embarked on an intensive effort to introduce the use of Information Communication Technologies (ICTs) in schools since 1997. The introduction of ICTs in the public sector is expected to simplify the complex and bureaucratic procedures usually associated with education field. As the various ministries attempt to implement ICTs, the school teaching needs to keep up with the rapid changes in ICTs, and adopt a mind shift from the conventional method to a new way of thinking and doing things.

The responsibility for making the Electronic-Learning (E-Learning) function is the people who make up the education line, from policy makers to teachers down to its students. The ICTs revolution demands

that the teachers is continuously trained and equipped with new technical skills and adopt new approaches of teaching.

The Malaysian government has spent millions on equipping schools with computers in the hope that Malaysian students will have early exposure and will be computer savvy as we move into the era of information technology. By the year 2020, Malaysia hopes to be a developed and an industrialized country. Schools play important roles in ascertaining that our young citizens are computer literates. Malaysians need to compete in the global economy market. They will be knowledge workers, as this information technology will open up many doors or opportunities in a borderless world.

The Ministry of Education of Malaysia has been emphasizing the importance of cultivating the reading habits among Malaysians especially the younger generation. Reading should be cultivated among young children especially those who have very little English Language background. Students who do not read well tend to face problems in understanding, comprehending and in using the language itself. They tend to shy away or have no interest in the usage of the language. Self-esteem and language ego also contributes to their failure in the acquiring the language. Children should be encouraged and motivated into picking up the reading habit as this helps them to acquire knowledge, and with the assistance of computers; this will certainly

arouse their interest in reading and they unconsciously pick up the reading skills.

Apart from parents, teachers should realize that they too play an important role in cultivating the reading habits of their children. With the facilities provided such as computers, Liquid Crystal Display (LCD) and other technology, teachers should make full use or utilize these facilities to the fullest to make the teaching and learning process more interesting, fun and exciting for the students. The use of computers in the teaching of reading will motivate students to want to continue reading whilst they enjoy and have fun in the process of reading.

With the introduction of E-learning in CALL program in schools, teachers have to be trained to be computer literate and acquire necessary technical know-how. Some primary schools have been conducting ICTs related training program e.g. Computer Assisted Language Learning (CALL) to enable its teacher and students to keep up with the latest ICTs skills and knowledge. The core objective of these CALL related training and education is to support the computer competency level and improves the performance of its students in English. The success of CALL lies on the shoulders of the teachers. The teachers must be well equipped with the appropriate computer skills and knowledge to perform their teaching in CALL. Do the teachers have the necessary computer competencies to implement CALL? What

are their current CALL literacy levels? Do their CALL literacy levels affect their students' performance? What demographic factors affect their CALL literacy and students' performance levels?

1.4 Research Questions

Based on the problem statement, this study attempts to answer the following research questions:

- 1 What are the teachers' perception towards students' CALL literacy levels in reading at primary school?
- 2 What are the teacher's perceptions towards students' performance levels in reading with CALL courseware at primary school?
- 3. Was there a significant relationship between teacher's perception towards CALL literacy levels and students' performance levels in reading with CALL courseware at primary school

1.5 Hypotheses

The following hypotheses were formulated from the research questions:

- The teachers will have positive perception of students' CALL literacy levels in reading at primary school.
- The teachers will have positive perception of students' performance levels in reading with CALL courseware at primary school.

3. The teachers will have positive perception of relationship between teacher's perception towards CALL literacy levels and students' performance levels in reading with CALL courseware at primary school

1.6 Significance of the Study

This study focuses on the field of CALL in E-learning. CALL is an essential component in the implementation of E-learning. Teachers play a very important role in the teaching of reading to students. Beside the availability of textbooks, reading books, and methodology, learning to read with computer-assisted language learning will bring a new light not only to the teaching but also a new dimension for the students. Flexibility in conducting students' own reading time with the help of computer-assisted language learning will certainly give them the power to choose their own available and valuable time as well as the comfort of their own computer corner or at home.

The lack of computer knowledge and skills among the students in the primary school can definitely hinder the implementation of E-learning in CALL program. To ensure that CALL program is successful in primary schools, information about the students' CALL literacy and performance levels in reading and their relationship will be valuable for future planning as well as the development of CALL related courseware for our Malaysian primary school students.

A study on the relationship between teachers' perception towards CALL literacy and students' performance has not been carried out among the primary school teachers especially in Sarawak . Hence the findings of this study will provide valuable information for the schools and the educationist. This study is also important for the ministry of education since most research of this nature were done in foreign countries. This study will make teachers aware of a new systematic strategy on teaching and learning to read, with computer-assisted language learning.

1.7 Definition of Terms

For the purpose of this study, some important terms were defined as follows:

1.7.1 CALL Literacy

CALL is an acronym for Computer Assisted Language Learning software application. CALL literacy is defined as the respondents' perception of their level of knowledge about learning through CALL program and understanding regarding CALL program and the ability to use this software application.

1.7.2 CALL Literacy Levels

The teacher-perceived CALL literacy levels were categorized based on the criteria proposed by the Digital Literacy Self-Assessment Questionnaire:

None	Students may not know how to use CALL program or do not understand what the question means.
Little	Students have a basic understanding on how to use CALL program but need help.
Average	Students may learn reading with CALL program but often need help to figure things out.
Above	Students may learn reading with CALL program if
Average	they repeatedly use this program but may not have mastered all the functions yet.
Master	Student may learn reading with CALL program without any problem. They could probably train other students in this program.

1.7.3 Student Performance

Students performance can be define as the value added in a learning achieved by students at school. Students' performance level can be set against the standard determined by the school. It can be viewed as the contribution of the students to their studies. In general, students view examination or test quality as important factors in measuring students' performance. Students' performance is measured using test or examination for the purpose of improving students' performance in the future. However, several research studies have concluded that there is

no connection between personal traits and performance (Putti, 1989). But one can never totally ignore the fact that individual traits and the opportunity to perform have a role in determining students' performance.

1.7.4 Teachers

The teachers in this study referred to the English teachers teaching in primary schools around Kuching, Sarawak. The teachers performed duties such as teaching the four language skills, which include listening, speaking, reading and writing.

1.7.5 Frequency of CALL Program Attended

Frequency of Call Program attended referred to teachers' perception on the number of times a student has used the CALL program in reading.

1.7.6 Amount of Time of CALL Program Attended

Amount of time of Call Program attended referred to teachers' perception on the duration of time a student has used the CALL program in reading.

1.7.7 Accessibility of CALL Program

Accessibility of Call Program attended referred to teachers' perception on the ease to access the CALL program for use when a student needs to practice reading.

1.8 Delimitations of the Study

In this study the use of computers and the courseware is not a problem since most of the urban schools are having computers, computer lab, and even electricity supply. Most of the students are to some extent computer literate, and they have little difficulties in using not only the courseware but also the computer itself.

Students are also able to use the courseware at their own time and in the comfort at their home. Almost all students in the urban have at least a set of computer at home. Courseware provided by the ministry of education can be easily borrowed by the students, and to some extent the courseware could be copied as most of the computers provides by the ministry of education come with the cd-writer (cd copier).

Since the respondents are the teacher, they will have little difficulties in understanding the questions and even answer them correctly. There can be possibility that teachers do not answer the questions in the questionnaires as sincerely as they should, because they may just want

to portray a positive perception. Teachers may comment positively on the use of computer-assisted language learning in reading but they may actually have not put it into practice. Thus the data or information collected may not reflect the real situation.

1.9 Conclusion

This chapter introduces the background of this study, the statement of the problem, research questions, hypotheses, research framework, significance of study, limitation of study and the definitions of some important terms used in this study. It forms the basis for understanding this study in the following chapters.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section discusses the findings from past research pertaining to the CALL literacy and students' performance. It starts with the introduction of E-learning in CALL program and follows with the importance of CALL literacy and students' performance in E-learning in CALL program and how they are measured. The discussions continue with the CALL literacy and students' performance levels. This section concludes with a discussion on the relationship between CALL literacy and students' performance.

2.2 E-learning in CALL program

2.2.1 CALL Program in Malaysia

The Malaysian E-learning in CALL program is a multimedia networked paperless teaching within schools around the country to facilitate an e-learning concept to the students. The vision of E-learning in CALL program is one where government, schools, and students work together for the benefit of E-learning. The achievement of this vision calls for the application of information and communication technology to improve the students' performance in reading and decrease service delivery channels of the teachers. The objectives of E-learning in CALL program are to reinvent the school to make it more efficient and effective and act as a catalyst for the realization of Vision 2020. In the E-learning in CALL program implementation, one of the key commitments is using ICTs to meet the needs of students and teachers and not trailing behind on technological developments. The government has committed to ensure that all schools are deliverable electronically in years to come. This commitment is inextricably bound with the aim of improving service teaching to the students.

The E-learning in CALL program is one of the most highlighted government projects to bring the nation into the digital age using ICTs. This ICT era requires students who can think, create, learn and master the essentials of CALL program. The school environment in this era is compelled to become more of an electronic school than ever before.

Afsaneh and Kleiner (1992) point out that the use of ICTs in schools would help ease the teaching of information on resources of all kinds. They add that the availability of CALL program would help shorten the time required to learn in reading and get more reading opportunities than if done teaching manually.

In order to implement E-learning in CALL program successfully, the Malaysian teachers need to be CALL literate. Despite having a well-developed telecommunication infrastructure at school, Malaysia lacks knowledge teachers in E-learning. In a study of 49 countries, Malaysia was placed as 28th in computer literacy (Greenwald, 1997). This study shows that Malaysian workers were not ready to actively adopt ICTs in their daily works. In order to overcome this problem, many programs have been carried out to train the teachers in using CALL program as teaching tools.

2.2.2 Relevant CALL Research Done in Other Countries

The use of computers to enhance learning began in mid 60's (Rupley & Chevrette, 1983; Thompson, 1980). The introduction of computers in the school system has made them a high technology teaching aids. Innovative software programs, authoring capabilities, compact disk technology are providing teachers with new methods of incorporating culture, grammar and real language use in the classroom. Since the Malaysian ministry of education is emphasising on the usage of computers, software and courseware, it is appropriate to conduct similar study in the Malaysian education system.

Fletcher and Atkinson (1972), Orndorff (1987), Arroyo (1992), Adler-Kassner and Reynolds (1996) are few of those who had done research or studies on the effectiveness of using computers with appropriate reading software programs in learning language especially in reading skill. With their relevant findings and the research they have conducted, these have become the guideline and basis of this study.

Fletcher and Atkinson (1972) conduct one of the earliest studies in which children of an experimental group are later given posttest after 5 months of exposure to CAI performed better than those who did not.

In a study done at Pennsylvania State University, students who were diagnosed as having low reading skills were exposed to 10 hours of CAI in the Laboratory. Reading tests later showed improvement in the students reading abilities.

Both studies conducted by Fletcher and Atkinson, and by the Pennsylvania State University showed that children and students who are expose to computer aided learning are obviously able to read better then those who are not being exposed. Their findings are relevant and are applicable to our children and students as they face similar difficulties or problems in reading

even simple texts in English when they reach higher level of education. With their findings it might be able to help us understand our students and provide assistance in improving the standard of our students' reading ability.

A similar study was done at Duquesne University in Pennsylvania (Orndorff, 1987). The rational of the studies was the believed that many college students lack the ability to read. Generally students who scored better marks were those that were better readers.

Similar studies on the effect of extended use of computers on reading by Arroyo (1992) among 30 of the 75 grade seven students of South Chicago. 15 of them were subjected to an intensive computer assisted instruction program for the entire school year while the other 15 received no computer training and served as a control group. Test on the 30 students was later conducted and the results indicated a statistically significant increase in reading scores. Arroyo also points out that use of the computer also appeared to increase student motivation to learn.

Based on the researcher's experience and the exchange and sharing of information among a circle of English Language

teachers, the researcher feels that students using computers with the guidance of proper courseware over a multiple of time will eventually help students to be better readers. Better reader means the students are able to acquire more knowledge and experience from the texts that they have read.

2.3 Reading Skill

Reading skills can be substantially developed using computer assisted instructional programs. Word-level reading skills (word-recognition) are enhanced by activities such as cloze activities, anagrams, jumbled words and so on, which are found in many software programs. To practice reading at the sentence level, computer programs provide practice in ordering words within a sentence, text construction, or ordering sentences within a paragraph. Other programs provide extensive (article or story length) reading comprehension passages with accompanying word help and comprehension questions at the end of the selection.

2.3.1 The Importance of Reading

Reading can enhance students' general language competence. Grabe (1991) and Paran (1996) have emphasized the importance of reading in providing students with practice in automaticity of word recognition and decoding the symbols on the printed page often called bottom-up processing. Reading increases the students' exposure to the language.

The quality of exposure to language that learners receive is seen as important to their potential to acquire new forms from the input. Reading increases knowledge of vocabulary.

Nagy and Herman (1987) claimed that children between grades three and twelve (US grade levels) learn up to 3000 words a year. It is thought that only a small percentage of such learning is due to direct vocabulary instruction, the remainder being due to acquisition of words from reading.

2.3.2 Reading Improves Writing and Prediction Skills

Reading can lead to improvement in writing. Stotsky (1983) and Krashen (1984) reviewed a number of studies that appear to show the positive effect of reading on the subjects' writing skills. Reading thus is an effective means of fostering improvement in students writing. Reading can motivate learners to read. Reading material selected for reading should address students' needs, tastes and interests, so as to rejuvenate and motivate students to read. Reading merge previously learned language. Extensive reading of high-interest material for students offers the potential for reinforcing and recombining language learned in the classroom. Reading facilitates the development of prediction skills. One of the currently accepted perspectives on the reading process is that it involves background knowledge. Such knowledge is seen as providing a platform for readers to predict the content of a text on the basis of a pre-existing schema. When students read, these schemas are activated and help the reader to decode and interpret the message beyond the printed words. These processes presuppose that readers predict, sample, hypothesize and reorganize their understanding of the message as it unfolds while reading (Nunan, 1991).

2.4 CALL Literacy

Research has indicated that there is no definite definition of CALL literacy. Different people hold different views about CALL literacy. Since it was first introduced in the 1960's, the definition of CALL literacy has dramatically changed (Yasin, Green, & Marwan., 1989; Dolgite, 1987).

Initially, the definition of CALL literacy was based on the ability to learn reading computer programs. Computer professionals felt that to be computer literate, a person must be able to read and write computer programs in at least one of the common machine languages.

However, some educationists were against this definition of CALL literacy. People argue that a CALL literate person merely needs to know how to use a computer and does not need to know about programming. Anderson, Klassen, Krohn, and Smith-Cunnien (1982) simultaneously

viewed CALL literacy as whatever understandings, skills and attitudes one needs to function effectively within a given role that directly involves computers. Simonson and Thompson (1990) define a computer literate as having the competencies to understand the basic principles of the computers as a system and potential applications for computers, and have positive attitudes toward computer and its related technologies. Paprzycki, Mitchell and Duckett, (1994) defined CALL literacy as having the ability to use a computer for practical purposes. Langhorne, Donham, Gross and Rehmke (1989) viewed CALL literacy as having the ability to perform basic operations such as entering and quitting in program, using a variety of functions such as role play in reading, listening and doing the exercise and test through the program.

2.5 Students' Performance

There are various views about students' performance. In other words, the term students' performance can mean different things to different people. Hiltrop and Despres (1994) define students' performance as the value added in a learning achieved by students at school. Performance is the student's level of achievement against the standard determined by the school. It is also viewed as the contribution of the students to their studies (Mobberg & Caldwell, 1988). According to Johns (1992), students' performance is the degree to which the school student contributes to reach the learning objectives. Ivancevich and Matterson (1996) viewed students' performance as a function of the capacity to

perform, the opportunity to perform and the willingness to perform in their studies.

Whereas Cheng and Kalleberg (1996) view students' performance from the student's perspective, students' performance can be measured against certain standard. In general, students view examination or test quality as important factors in measuring students' performance. Students' performance is measured using test or examination for the purpose of improving students' performance in the future. Beside that, it also can be used for the purposes of written questioning, oral questioning and quiz (Tsui, 1998).

2.5.1 Factors Contributing To Students Performance

Fisher, Schoefeldt, and Shaw (1993) stated that one of the critical factors, which contribute to a student's success in their studies, is its ability to measure students' performance effectively and to utilize the feedback or information collected from the measurement to improve its existing weaknesses. They also found that the feedback from the measurement could help the students to understand their standard towards the achievement of their studies. Traditional students' performance has put emphasis on measuring of individual understanding the concept and theoretical aspect of their studies. However, several research studies have concluded that there is no connection between

personal traits and performance (Putti, 1989). But one can never totally ignore the fact that individual traits have a role in determining students' performance. As a result, the study-centred approach comes into existence. This approach viewed an individual's performance in his present studies as an important factor in judging him. Hence, the responsibilities and requirements of the current studies assignment become the yardsticks against which performance is measured. The emphasis is on the particular requirement of the studies and on comparing and relating the individual's performance to his major responsibilities.

2.5.2 Objective-Centred Approach

Another approach in the evolution of students' performance measurement method is the objective-centred approach. Under this approach, specific objectives are established for each position. This approach emphasizes on the objectives that identify the specific results to be achieved over a given period of time (Bentley, 1996). Usually the given period of time is one year. At the end of this period, actual results achieved are measured against the original objectives planned and the results expected. According to Putti (1989), this process was derived from the notion that students' performance should not be measured by

competencies or what is done. It should be measuring the outcomes and the results of an individual's effort.

2.5.3 The Formal and Informal Measurement

Students' performance can be measured in two ways: the formal and informal measurement. Rating by giving points to individual student is categorized as formal measurement. In the informal measurement, student's performance is measured through the process of feedback. According to Miller (1991) rating by using scales is necessary. It can be measured from the aspects of knowledge levels, efficiency, student's attitude while performing their task, work quality, attendance and punctuality, time required to accomplish the studies, leadership skills, and creativity and so on so forth.

2.5.4 Student's Performance in This Study

For the purpose of this study, students performance can be define as the value added in a learning achieved by students at school. Students' performance level can be set against the standard determined by the school. It can be viewed as the contribution of the students to their studies. In general, students view examination or test quality as important factors in measuring students' performance. Students' performance is measured using test or examination for the purpose of improving

students' performance in the future. However, several research studies have concluded that there is no connection between personal traits and performance (Putti, 1989). But one can never totally ignore the fact that individual traits and the opportunity to perform have a role in determining students' performance.

This study applies the combination of individual and studiescentred approach in measuring students' performance. This study felt that one could not ignore the role of personal traits because some of these traits bear significance in determining students' performance. But at the same time, the responsibilities and requirement of the current studies assignment should also be taken into account.

Rating scales were used for rating students' performance of the respondents in this study. This method focused on the individuals who perform the studies. The traits or characteristics of the individual were identified for a particular studies classification and individuals were rated on these using a five-point scale. The traits used for this study were opportunity of being assigned to following ordered by teacher, on time learning, willingness to learn and initiative in learning the best.

2.6 Relationship between CALL literacy and Students' Performance

A study was carried out in United States among the college graduates to determine the relationship between their improved computer skills and students' performance. The Graduate Follow-Up Survey, which was administered over the telephone to recent graduates of Rio Salado College reported that out of a total of seventy-nine graduates participated in the survey, seventy-three percent of them agreed or strongly agreed that their improved computer skills enhanced students' performance.

Mikuletoky and Winchester (1983) in their study to determine the impact of current technological advances in health information systems in rural hospitals throughout southern Illinois noted that there was a relationship between students' performance of nurses and their CALL literacy level. Nurses who had high CALL literacy levels were found to have higher students' performance levels.

However, according to Bentley (1996) many people have the simple theory that if we increase the level of competencies among students then improved performance will follow. Unfortunately, his study reported that this theory is not always correct. Although students need to have the expected levels of computer competency, it is important to know what levels of competence are needed for what is expected. Only when this information is available, it is then possible to enhance the
competencies accordingly. This report suggests that improving CALL literacy do not necessary lead to improved students' performance. Cambell, McCloy, Oppler, and Sager (1993) simultaneously stated that students' performance is not only influenced by certain competency level but also added that it could also be influenced by other factors such as attitudes toward studies, organizational culture, reward system, and work environment.

Previous findings report the existence of positive relationship between CALL literacy and students' performance. People with higher CALL literacy tended to have higher students' performance. The expectation of this study was to find a positive relationship between CALL literacy and students' performance. Those who have higher level of CALL literacy should have better students' performance.

2.7 Differences in CALL literacy and Students' performance Levels Based on Demographic Factors

2.7.1 CALL Literacy and Frequency of CALL Program Attended

Sia (1999) in his study on the relationship between attitudes toward computers and computer literacy among the secondary school teachers in Miri found significant differences in CALL literacy levels based on the number of computer program attended. Andrews (2000) also found significant differences in

computer literacy level between management personnel who had attended different numbers of computer training program. People who had attended more computer program had higher computer literacy level.

The literature suggests that those who had attended more computer program had a higher computer literacy level. This study will determine if the similar relationship between CALL literacy and frequency of CALL program attended by students exist among the teachers' perception in primary school.

2.7.2 CALL Literacy and Amount Time of CALL Program Attended

Sia (1999) and Khoo (1999) report that there are positive relationship between CALL literacy and experience in using computers after doing studies among the teachers. Both of them reported that teachers with more experience using computers generally had higher level of computer literacy. Andrews (2000) also found similar relationship between computer literacy and amount of computer experience among the educational management personnel. Educational management personnel who had more experience in using computers had a higher computer literacy level. These findings support the general hypothesis that

those who have more computer experience would have a higher computer literacy level.

It is interesting to investigate if the teachers' perception is correct on whether there exist any differences between CALL literacy and the amount time of CALL program attended by students of primary schools.

2.7.3 CALL Literacy and Accessibility to CALL Program

Lucas (2000) reported that the level of computer literacy increases when students have easy access to the office computers. If a student has to leave his or her school to find a computer to use, the computer usage levels decreases. Lucas (2000) concluded that lower computer usage levels could lead to lower computer literacy level.

This study hopes to look into whether students have accessibility of computers or whether they have limited use or hardly able to have access of computers.

This study will investigate the perception of primary school teachers' if there exist any significant differences between CALL literacy and accessibility to CALL program attended by students exists among the teachers' perception in primary school.

2.7.4 Students' Performance and Frequency of CALL Program Attended

Ghani and Deshpande (1993) reported significant difference in students' performance levels between students who had never attended any computer training program with those who had attended one to three computer training program. He further reported that students who had attended more computertraining program had higher students' performance level. This study implies that number of computer training program had an influence in students' performance level.

This study will determine if the similar relationship between students' performance and frequency of CALL program attended by students exist among the teachers' perception in primary school.

2.7.5 Students' performance and Amount Time of CALL Program Attended

Studies had been conducted to determine if students with more computer experience perform better than students with less computer experience (Nebeker & Tatum, 1993). In a study to determine factors influencing work performance, Czaja (1997) reported that the computer experience is correlated to students'

performance. Students with more computer experience were performing better at their studies. She further stresses that this is due to more exposure to using computers results in better performance.

It appears logical that those who had more computer experience would naturally have a higher students' performance level. But computer experience will not increase students' performance if the studies are not computer-related. This study will determine whether students with adequate computer literacy will perform better. It will also determine the significant association of the amount of time spent using CALL related courseware by the students with those who are not being exposed to the usage of the courseware in the primary school

2.7.6 Students' Performance and Accessibility to CALL Program

Researcher having reviewed the literature through a search at the local libraries and on-lined search at Emerald Library, Proquest, Eric Digest and other general search engines such as Yahoo, Google, and Alta Vista, failed to discover studies on the relationship between students' performance and accessibility to computers in schools.

Nevertheless, it is of interest to this study to investigate the existence of significant differences in students' performance based on the accessibility to school computers. If accessibility to computers were found influencing the students' performance level the schools should consider making computers more accessible or can be accessed easily by the students to enhance their performance level.

2.8 Conclusion

This chapter covers major areas of concerns pertaining to the study. It started with discussions on E-learning in CALL program. This was followed by definitions of CALL literacy and students' performance. Then it discussed on findings form previous studies on whether significant relationship exists between CALL literacy and students' performance. It further presented the findings from previous study on whether significant differences in CALL literacy and students' performance exist based on demographic factors such as frequency of CALL program attended, amount time of CALL program attended, and accessibility to Call program.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter describes the methodology that was used in the study, the research design, population and sample, instrumentation, data collection procedures, and data analysis procedures.

3.2 Research Design

This study used the survey method to obtain data. Survey questionnaires were distributed personally by the researcher to the respondents. Questionnaire was used because it is less time-consuming, less expensive, and able to cover a large number of subjects and may elicit more truthful responses as confidentiality is guaranteed (Sekaran, 1992; Frankel & Wallen, 1990).

There were three important sets of data collected. One was the demographic data of the respondents, the second was the measure of CALL literacy levels and the third was the measure of students' performance levels. All these sets of data were collected from the respondents through a three-part questionnaire.

The dependent variables investigated were CALL literacy and students' performance levels. The independent variables were the demographic

factors such as frequency of CALL program attended, amount time of CALL program, accessibility to CALL program.

3.3 Research Location

The location of this study was the primary schools around Kuching, Sarawak.

3.4 The Respondents

The respondents of this study comprises of 40 primary school teachers. They comprised 20 female and 20 male teachers. They are teaching in the various schools around Kuching. Out of these forty teachers, 22 are from urban primary schools and another 18 are from sub-urban primary schools. The reasons for the selection of these teachers are because they are a good representation of the various schools and a majority of these teachers are currently teaching the Year 1 and Year 2 using the software or courseware provided by the ministry.

3.5 The Research Instrument

This study used a questionnaire to obtain the required data. The questionnaire consisted of three sections. Section A consisted of five items related to the respondents' demographic data such as students' frequency of CALL program attended, amount of time attended CALL program and accessibility to CALL program at primary school.

Section B measured the respondents' CALL literacy level. CALL literacy was defined as the respondents' perception of student level of knowledge, skills and understanding regarding CALL software applications.

The CALL literacy scale in this study was taken and remodified from the Digital Literacy Self-Assessment Questionnaire. A total of twelve items, which corresponded to the definition of CALL literacy in this study, were selected. This section was consisted of twelve items, which measured by using items 1 - 12 in the questionnaire. The CALL literacy scale ranged from "None" to "Master" level of CALL literacy.

Section C comprises of 12 items related to the respondents' perception on students' performance level. The items involved measuring the respondent's perception on students' performance in using CALL program. This section was consisted of twelve items, which measured by using items 1 - 12 in the questionnaire. The students' performance scale ranged from "Strongly disagree" to "Strongly agree".

3.6 Pilot Test

A pilot test was carried out to determine the reliability of Section B and Section C of the questionnaire. Ten sets of questionnaire were administered to the teachers around Kuching town. The data from ten sets of completed questionnaires will be analyzed to determine the

values. Thirty sets of questionnaire were collected back where four sets were incomplete. Hence, data from nine sets of completed questionnaires were analyzed using The Statistical Package for Social Sciences (SPSS) to determine the Cronbach's Alpha values. The Crobach's Alpha values for Section B (CALL Literacy) and Section C (Student Performance) were 0.88 and 0.82 respectively. The Cronbach's Alpha values obtained were acceptable and showed that the questionnaire was reliable and could be used for the purpose of this study.

3.7 Data Collection Procedure

The researcher personally handed the questionnaire to each of the respondents and informed them that they were given a week to fill up the questionnaire which were then collected by the researcher.

3.8 Data Analysis Procedure

The data collected were analyzed using the Statistical Package for Social Sciences (SPSS). The data were analyzed according to the research objectives stated in chapter one.

3.8.1 CALL Literacy Level

This section consists of 12 items. Each of the 12 items in this section had scores of 1 = None, 2 = Little, 3 = Average, 4 = Above average, and 5 = Master. Respondents' raw scores for all

40 items were summed. Hence, the maximum score for each respondent was 12 X 5 = 60; while the minimum score was 12 X 1 = 12.

The range of scores for the different CALL literacy levels was then calculated as follow:

Table 3.1

Distribution of CALL literacy Scores and their Levels

Scores	CALL literacy Levels
11.5 – 21.3	Novice
21.3 – 31.1	Beginner
31.1 – 40.9	Intermediate
40.9 – 50.9	Advance
50.9 - 60.5	Expert

3.8.2 Students' performance Level

For this section, a five-point Likert Scale of Strongly Disagree (1), Disagree (2), Neutral (3), Agree (4) and Strongly agree (5) was used to indicate the subjects' responses to every items in the scale. The determination of students' performance levels was done using the same procedures as in 3.8.1. The distribution is shown in Table 3.2.

Table 3.2

Scores	Students' performance Levels
11.5 – 21.3	Very Low
21.3 - 31.1	Low
31.1 - 40.9	Average
40.9 – 50.9	High
50.9 60.5	Very High

Distribution of Students' performance Scores and their Levels

3.8.3 Data Analysis

Descriptive analysis was used to describe the CALL literacy and students' performance levels. Frequency (f) and percentage (%) were used to describe them. Inferential analysis, for example Pearson Correlation was to describe the relationship between the teacher's perception of CALL literacy and students' performance levels in reading with CALL courseware at primary school

3.9 Conclusion

This chapter outlines the research methodology used in this study. The development of questionnaire and the procedure for data collection and analysis were also discussed in this chapter. The following chapter discusses the results and discussions.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter presents and discusses the results of the study based on the research questions and research hypotheses as stated in chapter one.

4.2 Teacher Perception on Students' CALL Literacy Level in Reading

Research question investigated on the teachers' perceptions towards students' CALL literacy levels in reading at primary school in Table 4.1 show that a third of the respondents (35.0%, 14) perceived themselves to be at the intermediate level of CALL literacy. A quarter (22.5%, 9) felt that they were at the "advance level" of CALL literacy. An equal number of respondents (15.0%, 6) perceived themselves to be "beginner" and "expert" CALL users. Five respondents (12.5%) felt that they were at the "novice level" of CALL literacy.

Score	CALL	Frequency	Percentage
	Literacy		
	Level		
39.5 - 71.7	Novice	5	12.5
71.7 – 103.9	Beginner	6	15.0
103.9 - 136.1	Intermediate	14	35.0
136.1 – 168.3	Advance	9	22.5
168.3 – 200.5	Expert	6	15.0
Total		40	100.0

Table 4.1 Distribution of Respondents toward CALL Literacy Levels

The first hypothesis that the teachers will have positive perception of students' CALL literacy levels in reading at primary school (with reference to the result in Table 4.1) has been confirmed because a majority of the teachers have positive perception of students' CALL literacy levels in reading at primary school.



Graph 4.1 Teachers' Perception Towards Students CALL Literacy

Graph 4.1 is a pictorial representation of teachers' perceptions towards students' CALL literacy levels in reading at primary schools.

4.3 Teacher Perceptions on Students' Performance Level in Reading

The research questions studied on the teachers' perceptions towards students' performance levels in reading with CALL courseware at primary school with reference to table 4.2 shows that more than half (50.0%, 20) of respondents perceived students to be at the "high level" of students' performance in reading CALL courseware. About a quarter (20.0%, 11) of respondents felt that students were at "average level" of performance and nine respondents (17.5%) perceived

students to be at "very high level" of performance in reading CALL courseware.

Table 4.2	Distribution	of	Respondents	by	Students'	Performance
Levels						

Score	Students'	Frequency	Percentage
	Performance		
	Level		
11.5 - 21.3	Very Low	1	2.5
21.3 - 31.1	Low	1	2.5
31.1 - 40.9	Average	11	27.5
40.9 – 50.7	High	20	50.0
50.7 - 60.5	Very High	7	17.5
Total		40	100.0

The second hypothesis stated that teachers would have positive perception of students' performance level in reading at primary school. The result in Table 4.2, shows that the hypothesis has been accepted because a majority of the teachers will have positive perception of students' performance levels in reading at primary school.

Graph 4.2 Teachers' Perceptions Towards Students Performance

Levels



Graph 4.2 is representation of teachers' perceptions towards students' performance levels in reading at primary school.

4.4 Relationship between CALL Literacy and Student Performance

This study suggested the hypothesis that there was no significant relationship between the teachers 'perceptions towards students' performance levels in reading with CALL courseware at primary school. This means that students who have high CALL Literacy level need not necessary perform better as compared to students who have low CALL Literacy level. In other words students may perform better even though their CALL literacy level may be low and vice versa. Therefore it can be concluded that there is no significant relationship between CALL literacy level and student performance.

4.5 Conclusion

This chapter presented the findings of this study. First, the CALL literacy and students' performance levels of the respondents were presented. Then, the relationship between the teachers 'perceptions towards students' performance levels in reading with CALL courseware at primary school was put forth.

CHAPTER FIVE

CONCLUSIONS AND RECOMENDATIONS

5.1 Introduction

This chapter contains a summary of the study, a discussion on the findings, and the conclusions of the study as well as recommendations for future research and practices.

5.2 A summary of the finding

This study was carried out in primary schools in Kuching. The respondents of this study were the teachers of primary school. The objectives of this study were:

- What are the teachers' perceptions towards students' CALL literacy levels in reading at primary school?
- 2. What are the teacher's perceptions towards students' performance levels in reading with CALL courseware at primary school?
- 3. Was there a significant relationship between teacher's perception towards CALL literacy levels and students' performance levels in reading with CALL courseware at primary school?

A questionnaire was developed to collect respondents' demographic data, CALL literacy and students' performance levels. The CALL literacy section of the questionnaire consists of 12 items. The students' performance section in the questionnaire also consists of 12 items. The questionnaire was pilot tested with 40 of the primary school teachers. The reliability index (Alpha value = Section B (CALL Literacy) and Section C (Student Performance) were 0.88 and 0.82 respectively) for the questionnaire was appropriate for use in the actual study. Out of the 40 questionnaires distributed, 40 sets were fully completed and used in the analysis. The data collected was analysed using SPSS Version 10.0. Descriptive statistics were used to determine the CALL literacy and students' performance levels.

5.3 Discussion

5.3.1 CALL Literacy Levels

The results of the study revealed that a third of the respondents (35.0%, 14) perceived students to be at the "intermediate level" of CALL literacy. It implied that most of the students could perform CALL in reading, but had to struggle or face problems in some areas.

A quarter (22.5%, 9) of the respondents felt that the students were at the "advance level" of CALL literacy. This finding

indicates thaat teachers' perceptions that students were able to practice in reading with CALL. Students could perform the CALL in reading repeatedly with great success or can read without any problem.

An equal number of respondents (15.0%, 6) perceived students to be "beginner" and "expert" CALL users. Five respondents (12.5%) felt that some of the students were at the "novice level" of CALL literacy. The "beginners" had little CALL experience and were only able to practice in reading with CALL. They had a basic understanding of CALL functions, but could not practice in reading with CALL successfully if there were no assistance at all. More CALL trainings were required to develop their CALL literacy.

Consequently, "expert" CALL users had the ability to practice in reading with CALL effectively. They are familiar with the technology and can read with CALL without any problems. They also had the ability to train their peers.

Five respondents (12.5%) felt that the students were at the "novice level" of CALL literacy. This group of respondents perceived that the students had very limited knowledge and skills related to CALL. Students had no understanding of CALL at

all. They do not know how to operate even the basic CALLrelated functions.

5.3.2 Students' Performance Levels

A majority (50%, 20) of the respondents perceived students to be at the "high level" of students' performance. About a quarter (20%, 11) of respondents felt that the students were at "average level" of students' performance. Nine respondents (17.5%) perceived students to be at "very high level" of performance.

These findings imply that most of the teachers in primary school perceived that the students have performed well. A majority of them were reported to have high or very high level of students' performance.

5.3.3 Relationship between CALL Literacy and Students' Performance

The teachers' perception on the relationship between CALL literacy and students' performance in Primary Schools was not significant. There were 29 out of 40 respondents who perceived that their students were CALL literate whereas 38 of the respondents perceived that their students were able to read using the CALL-related courseware. This implies that the

teachers' perception that high CALL literacy levels among students do not necessarily contribute to high students' performance level and vice versa.

This finding was contradictory to the findings from the Graduate Follow-Up Survey, and Mikuletoky and Winchester (1983). They reported that learners who had higher CALL literacy levels also had higher learners' performance levels. This is because learners who are more familiar with CALL tend to perform better in their learning. However, it depends on how much their learning is computer-related. The possible reasons for the contradictory of these two findings could be due to differences in respondents learning styles; some students may not prefer independent learning but rather a teacher who is constantly there to assist them. Some students may have high CALL literacy level but may not perform well as materials may not be of interest to them, learners' performance varies from each individual and finally the scales used in the studies are not similar.

However, this finding was consistent with the findings from Bentley (1996). He reported that improvement in CALL literacy need not necessary lead to improvement in learners' performance. This is because the level of learners' performance does not depend solely on the CALL literacy level. Learners'

performance could be influenced by other factors like the learners' attitudes toward their learner's rewards system, the school culture, and the students' studying environment (Cambell, Mc Cloy, Oppler, & Sager, 1993). It is of utmost important that teachers who need to improve their learners' performance levels especially in reading must not only look at ways and means to increase their students' computer literacy levels but must also look into other factors as well.

5.4 Implications of the Study

The findings of this study show no significant relationship between CALL literacy and students' performance in the perceptions among primary school teachers. It implies that manipulations of either variable would have no effect on the other variable. Efforts to increase CALL literacy level may not produce corresponding effect on students' performance. Primary school management should be aware that to increase students' performance, there might be a need to improve other factors such as student's attitude, school culture, and learning environment as well.

The courseware designers and developers, including the ministry of education should address this matter seriously. The courseware developed for the students should be user-friendly. Creating

courseware that will enable the beginners or even novices to use them at ease, without much effort will encourage them to learn effectively.

5.5 Limitation of the Study

One of the limitations of this study is that, it is not carried out in remote schools, as these schools are not equipped with computers. A majority of these remote schools do not have electricity supply but instead they use generators to generate electricity for only a few hours. The perceptions of these teachers in the remote schools are not taken into consideration in this study. The views and opinions of the respondents who are primary school teachers around Kuching area do not represent all the primary school teachers teaching in Kuching.

The shortage or lack of computers, unavailability of electricity as well no proper place or storage areas for computers are disadvantages to some students. Poor or lack of computer facilities in some schools may hinder the process of teaching and learning. Even though the outcome of this study is very encouraging, it might not be so for students in the rural schools. Not all students have their own computer at home, which is another factor that contributes to the limitation of this study.

A small number of the urban schools having computer labs do not allow their younger students in primary 1 and 2 to use the computers

in the lab. The reason being so is that their computers are donated by some individuals or only for the use of the computer club members.

The time constraint is another factor that must be addressed in this study. Questionnaires alone are not enough to obtain a more universal result. Face to face interview was not carried out because the researcher who is also a working adult, has no time in conducting hands on tests and interviews which can project a better result.

5.6 Recommendations

The following are some recommendations for future researchers who would be interested in the study of CALL literacy and students' performance:

- a) This study was confined to the teacher's perception in primary school only. It is recommended that similar studies be carried out in others such as in secondary school or in other learning institutions. This would give a clearer view of the relationship between CALL literacy and students' performance.
- b) A similar study could also be carried out in the private schools. Such study would provide findings for comparison to identify appropriate intervention measures to be taken to enhance both CALL literacy and students' performance.

- c) Future researchers should also measure students' performance not just through the respondents' self-perceptions but also obtain data from students and parents.
- d) This study did not include the number of the CALL courses or classes attended by students outside school hours. Future researchers should consider including the CALL courses or classes attended by students outside the school to obtain a clearer picture of the CALL literacy levels based on the teacher's perception.
- e) The items listed in the instrument measuring students' performance were rather few and some items tend to elicit positive response from the respondents. A more comprehensive instrument should be designed to be used in future research.

5.7 Conclusion

This chapter put forward a summary of the study, discussion of the findings, and conclusions and recommendations for the schools and future researchers.

The researcher feels that even though the study is a success, they are some loopholes in administering the questionnaires. He feels that some

of the respondents do not answer the questionnaires sincerely. A handful of the respondents only responded to the questionnaires when the researcher came to collect them.

The researcher also feels that besides the questionnaire, personal interviews with the respondents and the students should also be done. Post-test and pre-test should also be administered on students to have clearer views on their reading ability levels.

Respondents and the students of this study do not represent all the teachers and students in Kuching. Questionnaires should be distributed to more schools rather then to selected schools. Respondents and Students from the rural area are not involve in this study, and yet they are also using the same courseware provided by the ministry of education.

BIBLIOGRAPHY

- Anderson, R.O., Klassen, D. L., Krohn, K. R., & Smith-Cunnien, P. (1982).
 Assessing computer literacy, computer awareness and literacy: *An empirical assessment.* Minnesota: Minnesota Education Computing Consortium.
- Andrews, B. C. (2000). *Computer literacy, attitude and usage levels among management personnel in urban secondary schools in Kuching, Sarawak.* University Malaysia Sarawak, Kota Samarahan: Sarawak.
- Czaja, S. J. (1997). Computer technology and the oIder adult. In M. G.
 Helander, T. K. Landauer, & P. V. Prabhu (Eds), *Handbook of Human-Computer Interaction*. (pp. 23-30). Amsterdam: Elsevier.
- David Nunan (1995). *Research Methods in Language Learning*. USA : Cambridge University Press.
- Digital literacy self-assessment questionnaire (n.d.). Retrieved October 23, 2002, from University of Washington Web Site: http://courses.washington.edu/hsstudev/self-assess.html
- Dolgite, O.G. (1987). Measuring computer literacy. *Journal of Education Technology System*, *16*(1), 29-43.
- Khoo, C. H. (1999). Computer experience level, computer competency level and attitude towards using computers among teachers in national primary schools. University Malaysia Sarawak, Kota Samarahan: Sarawak.

Langhorne, M. J., Donham, J.O., Gross, J.F., & Rehmke, D. (1989). Teaching with computers: *A new menu for the 90s.* London: Kogan Page.

Lucas, H. C. Jr. (2000). *Information technology for management*. New York: McGraw-Hill.

Sia, P.W. (1999). *The relationship between computer anxiety and computer literacy among urban secondary schools teachers in Miri.* University Malaysia Sarawak, Kota Samarahan: Sarawak. Questionnaire Soal Selidik Kajian

TEACHERS' PERCEPTION TOWARDS COMPUTER ASSISTED LANGUAGE LEARNING AND STUDENT PERFORMANCE AMONG PRIMARY STUDENTS

Persepsi Guru Terhadap Literasi Program CALL dan Prestasi Pelajar di Kalangan Pelajar Sekolah Rendah

All Information Is Confidential

Semua Maklumat Adalah Dirahsiakan

Researcher

Pengkaji

Wennedy Danny

University Teknologi Mara Kota Samarahan Sarawak

Section A: Background Information

Bahagian A: Maklumat Latarbelakang

Please tick ($\sqrt{}$) or fill the appropriate response where necessary. Sila tandakan ($\sqrt{}$) atau isikan dengan respon yang sesuai di mana perlu.



3. How frequent should the students use CALL program per week?

Kekerapan Program CALL yang perlu dihadiri untuk seminggu oleh pelajar sekolah rendah?



Not necessary Tidak Perlu



1 – 3 times 1 – 3 kali



4 times & above 4 kali ke atas 4. What is the duration for students to use CALL program for one session? Apakah peruntukan masa yang perlukan oleh pelajar untuk menggunakan CALL program untuk satu sesi?

1 hour per week
l jam seminggu



2-3 hours per week
2-3 jam seminggu

2-3 jam seminggu



5. Can the CALL program be easily available when students need to practice their reading?

Adakah program CALL mudah dicapai apabila pelajar memerlukannya untuk mempraktis bacaan mereka?



Section B: CALL Program Literacy

Bahagian B: Literasi CALL Program

Please read the list of things students do with computers and tick (\checkmark) only one response that best describes the students' abilities.

Sila baca senarai perkara-perkara yang dilakukan oleh pelajar dengan komputer dan tandakan ($\sqrt{}$) pada **satu** respon yang paling tepat menggambarkan kebolehan dengan pelajar-pelajar sekolah rendah.

None	Student may not know how to use CALL program or you do not understand what this question means.						
Tiada	Pelajar mungkin tidak tahu bagaimana mengendalikan CALL program ini atau anda tidak faham makna soalan ini.						
Little	Students have basic understanding on CALL program but still need help.						
Sedikit	Pelajar mempunyai kefahaman yang asas tentang penggunaan program ini tapi memerlukan bantuan.						
Average	Students may learn reading with CALL program but often need help to figure things out.						
Sederhana	Pelajar mampu mempelajari bacaan melalui CALL program ini tetapi selalu memerlukan bantuan.						
Above	Students may learn reading with CALL program if they are						
Average Melebihi	repeatedly using the program but have not mastered all the functions yet.						
Sederhana	Pelajar mampu mempelajari bacaan melalui CALL program ini sekiranya dipraktiskan berulang kali tetapi belum menguasai semua fungsian kegunaan program ini.						
Master	Students may learn reading with CALL program without any problem. They can probably train other students in this program. <i>Pelajar mungkin dapat menguasai program ini dengan baik.</i>						
Menguasai	Mereka juga mungkin dapat membantu pelajar lain dalam menggunakan program ini.						

Task		Students' Present Level of CALL Program Literacy Tahap Literasi Program CALL							
	Tugas	None Little		Average	Above Average	Master			
		Tiada	Sedikit	Sederhana	Lebih Daripada Sederhana	Menguasai			
1	General CALL Knowledge Pengetahuan Am CALL Log-on, log-off, open, use and close CALL programs. Log masuk, log keluar, membuka, mengguna dan								
2	menutup CALL program. Use the functions of the left and right mouse buttons. Menggunakan fungsi butang kiri dan kanan tetikus.								
3	Use a mouse to "drag" an item. Menggunakan tetikus untuk mennyeret sesuatu item.								
4	Move quickly to the CALL program. Membuka cepat dengan program CALL.								
5	Use the functions of the CALL program. Menggunkan fungsi dalam program CALL.								
6	Open the reading dialogue files. <i>Membuka dialog bacaan</i> .								
7	Use the functions of the Speaker Kemahiran Menggnakan Speaker								

Task		Students' Present Level of CALL Program Literacy Tahap Literasi Program CALL								
	Tugas	None	Little	Average	Above Average	Master				
		Tiada	Sedikit	Sederhana	Lebih Daripada Sederhana	Menguasai				
8	Use a search engine (eg. Role Play on certain topic etc). Menggunakan enjin pencari (cth, Peranan mainan dalam topic tertentu dll).									
9	Save or print the related reading materials. Menyimpan atau mencetak sumber bacaan yang berguna.									
10	Use query facility to find data. Menggunakan kemudahan "query" untuk mencari data.									
11	Use data access pages to view, update or analyze the data from the CALL program. Menggunakan laman capaian data untuk melihat, mengemaskini atau menganalisis data dari CALL program.									
12	To print selected reading information from databases. Mencetak data terpilih dari sumber bacaan.									

Section C: Students' Performance

Bahagian C: Prestasi Pelajar

Please read the list about student performance and tick $(\sqrt{)}$ only one response that best describes your perception.

Sila baca senarai tentang prestasi pelajar dan tandakan ($\sqrt{}$) pada satu respon yang paling tepat menggambarkan pandangan anda.

1	2	3	4	5
Strongly	Disagree	Neutral	Agree	Strongly agree
disagree				
Sangat	Tidak	Neutral	Setuju	Sangat setuju
tidak	setuju			
bersetuju				

		1	2	3	4	5	OFFICIAL USE
1	Student will like the program.						
	Pelajar akan menyukai program ini						
2	Student will maintain a high attendance rate						
	in this program.						
	Pelajar akan mengekalkan tahap kehadiran						
	yang tinggi.						
3	Students will do reading well through this						
	program.						
	Pelajar akan mencapai prestasi yang baik						
	melalui program ini.						
4	Students will always follow the teacher's						
	instruction in using this program.						
	Pelajar akan sentias mematuhi arahan yang						
	diberi guru dalam penggunaan program ini.						
5	Students will always perform their best in						
	their reading.						
	Pelajar sentiasa berusaha untuk melakukan		1		i .		
	bacaan terbaik.						
6	Students are willing to learn reading						
	through CALL program.						
	Pelajar sedia belajar bacaan melalui CALL						
	program.						
7	CALL is very useful in assisting students in			2.			
	learning other language skills.			2			
	Call program sangat berguna dalam						
	membantu pelajar mempelajari kemahiran						
	lain yang berkaitan dengan bahasa.						

1		2	3	3 4				5		
Strongly disagree		Disagree	Neutral	Agree		Strongly agree			ree	
Sangat tidak		Tidak setuju	Neutral	Setuju		Sangat setuju			iju	
be	rsetuju					1	2		E	OFFICIAL USI
8	learnin Pelajai	g tool. r akan meng bagai alat	, program as a gunakan prog pembelajara	ram CALL	1	2	3	4	5	OFFICIAL USE
9	Call Pr achieve Progra	ogram will s ement. em ini dapat i pelaran pence	atisfy students memenuhi kep apaian dalam	erluan						
10	ability Progra	in reading. m ini dapat i	pts to improve neningkatkan dalam bacaai							
11	Learnin bring a but also Call pr yang be pembel									
12	Student availab lab or a Pelajar makma bersesu	ts will be all le and valua at home to us <i>akan memil</i> <i>komputerda</i>	ble to choose ble time at the e CALL progra ih tempat sepe- an masa yang mempelajari m	e computer am. erti di						

THANK YOU

TERIMA KASIH