

# **ESL STUDENTS' EXPECTATIONS OF THE COMPUTER**

by

**FRED JOHN SITIN**

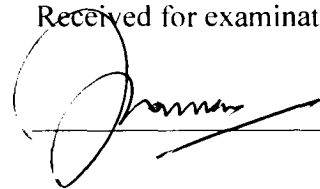
**(11316)**

**Final Year Project Submitted in Partial Fulfillment of the Requirements for the  
Degree of Bachelor of Education with Honours (ESL)  
Faculty of Cognitive Science and Human Development  
Universiti Malaysia Sarawak**

**May 2007**

A project entitled **ESL Students' Expectations of the Computer** was prepared by Fred John Sitin and submitted to the Faculty of Cognitive Science and Human Development in fulfillment of the requirements for the degree of Bachelor of Education with Honours (English as a Second Language).

Received for examination by:

A handwritten signature in black ink, appearing to read 'Joseph Ramanair', is written over a horizontal line. The signature is stylized with a large loop at the beginning.

(Signature of Supervisor)

JOSEPH RAMANAIR

(Name of Supervisor)

Date: 30.05.07

## TABLE OF CONTENTS

	Page	
ACKNOWLEDGEMENT	i	
LIST OF TABLES	ii & iii	
LIST OF FIGURES	iv	
LIST OF ABBREVIATIONS	v	
ABSTRACT	vi	
<i>ABSTRAK</i>	<i>vii</i>	
CHAPTER		
1	BACKGROUND TO THE STUDY	1
	1.0 Introduction	1
	1.1 Background to the Study	1
	1.2 Statement of the Problem	5
	1.3 Research Objectives	6
	1.4 Research Questions	6
	1.5 Significance of the Study	6
	1.5 Limitation of the Study	7
	1.6 Definitions of Key Terms	8
	1.6.1 Students' Expectation	8
	1.6.2 Role of the computer	9
	1.6.2 Computer-Based Learning	10
	1.7 Conclusion	11
2	LITERATURE REVIEW	12
	2.0 Introduction	12
	2.1 Historical Development of Computer in Education	12

	2.2 Potentials and Barriers of Computer Use in Education	15
	2.2.1 Potentials of Computer	15
	2.2.2 Barriers of Computer	19
	2.3 Roles of Computer in Education	22
	2.4 Computer in Undergraduate Students' Education	27
	2.5 Related Studies	32
	2.6 Conclusion	35
3	METHODOLOGY	36
	3.0 Introduction	36
	3.1 Research Methodology	36
	3.1.1 Sample of the Study	37
	3.1.2 Sites of the Study	38
	3.2 Research Instruments	38
	3.2.1 Questionnaire	39
	3.2.2 Semi-Structured Question for the Interview	40
	3.3 Pilot Testing	41
	3.4 Data Collection	42
	3.5 Data Analysis	43
	3.6 Conclusion	44
4	DATA ANALYSIS AND DISCUSSION OF FINDINGS	46
	4.0 Introduction	46
	4.1 Data Findings Analysis	48
	4.1.1 Students' Background Information	48
	4.1.1.1 Number of Years In Service	48
	4.1.1.2 Type of School Taught	50

4.1.1.3	Experience with CBL Courses	51
4.1.2	Teaching Experience and Expectations of Computer Roles	53
		57
4.1.3	Respondents' Working Environment and Expectations of the Role of Computer	61
4.1.4	Respondents' Initiative in Attending CBL Courses and Their Expectations of the Role of the Computer	65
4.1.5	Respondents' Computer Experiences and Expectations of the Computer	70
4.1.6	Semi-Structured Interview on Factors Contributing to Students Perceived Expectations on the Role of the Computer	73
4.2	Discussion of the Data Findings Analysis	76
4.3	Conclusion	76
5	SUMMARY, CONCLUSION, LIMITATION AND RECOMMENDATION	77
5.0	Introduction	77
5.1	Summary of the Research	77
5.2	Conclusion of the Research	79
5.3	Significance of the Study	81
5.4	Limitations of the Study	82
5.5	Recommendations for Further Research and Practice	82
	REFERENCES	84
	APPENDICES	95

## **ACKNOWLEDGEMENT**

I would like to express my gratitude and thanks to my supervisor, Mr Joseph Ramanair for his guidance in assessing the completion of this project. Apart being helpful and approachable, he has always being patient with my progress and development.

I would also like to take this opportunity to thank my fellow course-mates, the faculty staffs and the librarian staffs for their help and cooperation. Last but not least, I would like to express my gratitude to my family for their support and encouragement throughout the completion of this project.

## LIST OF TABLES

<b>Table</b>		<b>Page</b>
1	Kennedy And McNaught (1997) Design Approach on Learners and Computer Perspective of Computer-Based Learning	30
2	Result Findings on Number of Years In Service	48
3	Descriptive Statistic on Number of Years In Service	48
4	Chart on Number of Years In Service	49
5	Result Findings on Type of School Taught Before	50
6	Descriptive Statistic on Type of School Taught Before	50
7	Chart on Type of School Taught Before	51
8	Table on Experiences in Attending Specific Courses Related to the Use of Computer	52
9	Test of Homogeneity of Variances of Students Teaching Experience and Their Expectations of Computer Roles as Tutor	53
10	ANOVA Result of Students Teaching Experience and Their Expectations of Computer Roles as Tutor	54
11	Test of Homogeneity of Variances of Students Teaching Experience and Their Expectations of Computer Roles as Tool	55
12	ANOVA Result of Students Teaching Experience and Their Expectations of Computer Roles as Tool	56
13	Test of Homogeneity of Variances of Students Working Environment and Their Expectations of Computer Roles as Tutor	57
14	ANOVA Result of Students Working Environment and Their Expectations of Computer Roles as Tutor	58

15	Test of Homogeneity of Variances of Students Working Environment and Their Expectations of Computer Roles as Tool	59
16	ANOVA Result of Students Working Environment and Their Expectations of Computer Roles as Tool	60
17	Test of Homogeneity of Variances of Students Initiative in Attending CBL Courses and Their Expectations of Computer Roles as Tutor	61
18	ANOVA Result of Students Initiative in Attending CBL Courses and Their Expectations of Computer Roles as Tutor	62
19	Test of Homogeneity of Variances of Students Initiative in Attending CBL Courses and Their Expectations of Computer Roles as Tool	63
20	ANOVA Result of Students Initiative in Attending CBL Courses and Their Expectations of Computer Roles as Tool	63 & 64
21	Table on Pearson Correlation of The Students' Experience and Expectations of The Computer as Tutor	65 & 66
22	Table on Pearson Correlation of The Students' Experience and Expectations of The Computer as Tool	67 & 68
23	Analysis on Semi-Structured Interview of Factors Contributing to Students Perceived Expectations on The Role of The Computer	70, 71 & 72



## LIST OF FIGURES

Figures	Page
1 Learning Paradigms of the Computer	25

## LIST OF ABBREVIATIONS

CBL	Computer-Based Learning
ESL	English as Second Language
EEMS	English in the Teaching of Mathematic and Science
ICT	Information and Communication Technology
NMP	Ninth Malaysian Plan (Rancangan Malaysia Kesembilan)
PKPG	Special Degree-Training Program (Program Khas Pengsiswazahan Guru)
TESL	Teaching English as Second Language
UNIMAS	Universiti Malaysia Sarawak

## ABSTRACT

### *ESL Students' Expectations of the Computer*

*Fred John Sitin*

*This survey research aims to investigate thirty-eight ESL (Cohort 3) students' expectations of the computer with focus on their recent exposure to the computer-based learning (CBL) courses attended in UNIMAS. A review of literature is provided to elicit information and gain insights regarding how the ESL students should perceive their computer-based learning (CBL). The reviewed on related literatures suggested that learners will become more competent and competitive in their learning if they perceived computer as 'tool'. This research is conducted by using self-develop questionnaire as a technique to investigate the use of computer among ESL (Cohort 3) students in UNIMAS with focus on their expectations of the role of computer in their learning and semi-structured interview to find out the factors that influence students' perceived expectations of the role of computer. The questionnaires are analyzed by using the statistical analysis and the semi-structured interview is analyzed qualitatively. The analysis and discussion of data findings appeared to indicate that the ESL students generally expected computer to play the role as 'tool' in achieving their learning goals and future professional development particularly in their teaching profession.*

## ABSTRAK

### ***Jangkaan Pelajar- Pelajar ESL terhadap Komputer***

***Fred John Sitin***

*Kajian survei in bermatlamat untuk menyiasat jangkaan tiga puluh lapan pelajar-pelajar ESL (Kohort 3) terhadap komputer dengan fokus terhadap pendedahan terkini mereka dengan kursus-kursus pendekatan pembelajaran berkomputer yang dihadiri di UNIMAS. Analisis kajian terkini dihujahkan bagi membuat kaji selidik tentang maklumat dan intipati-intipati penting berkenaan dengan bagaimana pelajar-pelajar ESL harus mendekati pembelajaran berkomputer. Analisis dari kajian-kajian yang berkenaan memberi saranan bahawa pelajar-pelajar akan menjadi lebih kompeten dan berdaya saing dalam pembelajaran sekiranya mereka menerima komputer sebagai 'alat' dalam pembelajaran. Kajian ini dilaksanakan dengan menggunakan soalan yang diolah sendiri sebagai teknik menyiasat penggunaan komputer dikalangan pelajar-pelajar ESL (Kohort 3) di UNIMAS dengan fokus terhadap jangkaan mereka tentang peranan komputer dalam pembelajaran dan temuramah berstruktur bagi menyiasat faktor-faktor yang mempengaruhi jangkaan mereka terhadap komputer. Soalan-soalan dianalisis secara pengiraan statistik dan temuramah berstruktur dianalisis secara kualitatif. Hasil analisis dan perbincangan data mengetengahkan pelajar-pelajar ESL secara keseluruhannya meletakkan jangkaan bahawa komputer sepatutnya digunakan sebagai 'alat' bagi mencapai kecemerlangan dalam pembelajaran dan peningkatan mutu profesionalisma terutamanya dalam kerjaya perguruan mereka.*

# **CHAPTER ONE**

## **BACKGROUND OF THE STUDY**

### **1.0 Introduction**

This chapter covers the background of the study, which gives general information about computer used and integration within the education environment that links the idea to the topic of this research. The next stage of the introduction will follow by the statement of the problem related to this research, the research objectives, the research questions, significance of the study, limitation of the study and finally definitions of key terms and variables of the study.

### **1.1 Background to the Study**

Malaysian people have responded robustly to the challenge of 'Vision 2020' in becoming a fully-developed, matured and knowledge-rich society. Vision 2020, as visualized by Dr Mahathir Mohamad is an optimistic, yet realistic, aspiration which draws upon past achievements and embodies the collective hopes of the Malaysian people. A "developed Malaysia" covers the overall achievements in national unity, social integration, economic standard, social justice, political stability and its success in improving the quality of life of its community, both in the social and spiritual aspects as well as in instilling pride and confidence of the people in their nation. In line with the aim of making Malaysia a developed country by the year 2020, various programs have been and will be carried out by the Government which includes the Ninth Malaysian Plan (NMP) (Rancangan Malaysia Kesembilan, 2006). Within the NMP, Malaysia has decided

to introduce various initiatives in facilitating greater adoption of Information and Communication Technology (ICT) as part of the effort to develop a knowledge-rich society as visualize in Vision 2020.

The role and function of ICT in education has been acknowledged as a teaching and learning tool (Dr. Salbiah Ismail, 2003). Therefore, the traditional education system will need to be transformed to an education that stimulates thinking, creativity, caters to individual abilities and learning styles, and based on a more equitable access. The concept of ICT in education, as seen by the Ministry of Education, includes systems that enable information gathering, management, manipulation, access, and communication in various forms.

University Malaysia Sarawak (UNIMAS) as part of the higher educational institute in Malaysia has been implementing the integration of ICT in students learning by offering specific courses related to the use of computer. The courses are offered to the students as part of its vision to produce productive and competitive students that are going to be the future asset of our country. However the target populations of this research will be the English as Second Language (ESL) Cohort 3 students. Below are some brief descriptions of the specified courses which are related to computer-based learning (CBL) courses attended by those students:

*1. TMX 1011 End User Computing*

This introductory course provides an understanding and hands-on learning of how information technology can be used to support personal productivity. A

variety of popular common software packages are used in the practical work including document preparation, spreadsheets, databases, graphics, electronic mail and groupware software. (Buku Panduan: Fakulti Sains Kognitif Dan Pembangunan Manusia, 2004)

## *2. TMX2012 IT Tools For Knowledge Workers*

The course will discuss the importance of IT as a tools and why knowledge workers is importance in this information age. Interesting and relevant topics, such as Internetworking, Internet, multimedia, image processing and personal information management will be taught. Other important issues such as ethics, network security, and computer virus are covered in this course. This course aims to develop skill and understanding about the importance of technology and how to utilize the technology to become a knowledge worker. (Buku Panduan: Fakulti Sains Kognitif Dan Pembangunan Manusia, 2004)

## *3. KMP 2023 Mind tools*

This course exposes the potential of mind tool in teaching-learning and helps to develop students' skills in planning and developing the teaching program. The course offered an exposure on semantic network tools, dynamic modeling tools, interpretation tool, knowledge construction tool and conversation tool. Students will be trained to identify, critic, choose suitable technology for teaching-learning and develop technology application module for teaching-

learning. (Buku Panduan: Fakulti Sains Kognitif Dan Pembangunan Manusia, 2004)

#### *4. KMT4023 Computer Applications in the ESL Classroom*

This course provides a comprehensive hands-on exposure and experience to student teachers to use computer applications effectively in the ESL classroom. The course will cover the aspects of fundamental theories and applications of computer technology, which directly influence the ESL learning principles and methodologies. Students will learn how to evaluate existing ESL courseware, and articulate logical and effective critiques to improve and enhance the quality of learning in the ESL perspective. Students will also design and develop supplementary ESL materials using computer-assisted instruction, to demonstrate their comprehension and skills in using technology efficiently in the classroom. (Buku Panduan: Fakulti Sains Kognitif Dan Pembangunan Manusia, 2004)

The ESL Cohort 3 students are a group of in-service teachers undergoing a special degree-training program (PKPG) in UNIMAS, which is offered by Teacher Education Division. The students are equipped with a unique combination of theory and practice in ICT, communicative competence and performance, and qualitative and quantitative research, with the vision to produce Malaysian educators who are able to cope over the diverse challenges and demands of the teaching profession in the 21st century (Faculty of Cognitive Sciences and Human Development, 2006). The students are chosen based on their recent exposure to the specified courses stated above. These research populations



are unique as they have already had the experience in the actual working environment with some exposure on computer used and application that are integrated in school. Therefore, they would have more practical and realistic views on what to expect from computer-based learning.

## **1.2 Statement of the Problem**

Debevec et al. (2006) stated that CBL offers new learning strategies and environment for students besides the existing traditional learning methods. The CBL integrates the used of learning technology to introduce, reinforce, supplement and extend needed skills of the students (Williams, 2000). Therefore, there are needs to monitor the CBL utilization as to reflect the students' expectations on effective used of computer. Dawson (2006) argues that CBL environments provide the students with authentic learning experiences. Therefore, the students' experiences in term of what to expect from the CBL environments should be researched to illustrate effective, authentic and meaningful used of computer.

Warschauer and Healey (1998) stated that the role of computer has changed significantly in the last 30 years. Previously, computer was used principally as a 'tutor'. Technological and pedagogical developments allow the integration of computer technology as a 'tool'. The role of computers in learning and instruction has now become an important issue confronting large numbers of populations throughout the world due to the advent of multimedia computing and the Internet. The target group expectations play a crucial role in shaping their future teaching behaviors. Understanding the future

teachers' expectations will help improve their professional preparation. Pajares (1992) as cited in Wang (2002) stated that, "There are good reasons why attempting to understand the expectations of future teachers essential to teacher education" (p. 328). With computers becoming an essential part of the learning process, it is vital to investigate the target group expectations in such a learning environment. This research was designed to gain insights into ESL students' expectations of the CBL role where computers were available. Therefore, this research would provide useful insights of the students' expectations toward CBL environment with relation to its role whether as tutor or tool.

### **1.3 Research Objectives**

The objectives of this study are to:

1. identify students' expectations on the role of the computer
2. investigate factors that contribute to students' expectations on the role of computer

### **1.4 Research Questions**

This research examines these research questions:

1. What are the students' expectations of the role of computer?
2. What are the factors that contribute to the expectations?

### **1.5 Significance of the Study**

This research aims to highlight students' expectation of the role of the computer in the courses attended. Dawson (2006) stated that CBL environments provide the

students with authentic learning experiences on which to reflect. The students' views and expectation of the CBL learning environment should be taken into consideration as to illustrate effective, authentic and meaningful used of computer. Pajares (1992) further argues that there are good reasons why attempting to understand the expectations of future teachers essential to teacher education and their professional preparation. The needs to gain insights of the ESL students' expectations will lead to the effective and meaningful integration and utilization of computer-enhanced learning environment. In conclusion, the target students' expectations should match the goal of this research in order to illustrate effective, authentic and meaningful used of computer whether as tutor or tool in the ESL-CBL environment.

#### **1.6 Limitation of the Study**

The target population of the research will only cover the ESL Cohort 3 students who have recently attended all of the four specified CBL courses as response to their recent exposure of the computer-enhanced teaching and learning environment. Furthermore, the target populations have had few years teaching experience with real life exposure to the ICT facilities in school. As such, the population of the sample is limited to only 38 qualified respondents. Other students from other field background will not be taken into consideration due to the nature of their specializing skills and existing exposure to the CBL courses. Therefore, the results may not be generalized to other groups of respondent from other settings and specializing skills.

The time allocation of two days should be sufficient enough for the target respondents to provide their responses on the questionnaire. However, there would always be some possibilities that some of the respondents may simply respond for the sake of completing the tasks. Thus, the collected data may not reflect the exact expected result of the data findings. Another issue that might influence the data finding is the feelings of discomfort of the respondents towards the research. If they perceive it as upsetting, then they might not respond honestly. As a result, they will not be truthful in their responses and thus would affect the legitimacy of the findings.

## **1.7 Definitions of Key Terms**

### ***1.7.1 Students' Expectation***

Students' expectation resembles the students' perceived view and expectations of the role of computer whether as tutor or tool within the CBL environment. The expectations will cover the aspect of computer as 'tutor' with emphasis of computer as a vehicle for delivering instructional materials to the student (Taylor, 1980 as cited in Warschauer, 1996) and 'tool' with emphasis to empower the learner to understand and construct their own learning (Brierley & Kemble, 1991; Taylor, 1980 as cited in Warschauer, 1996). The students' expectations might vary from one to another but the main focus in this research will only look into the students' expectations of the computer whether as tutor or tool. It is hope that the students would agree that the computer should be used and utilized as tool for learning, which match the recent CBL educational goal. However, the expectation of computer as tutor is still acceptable as it is still practical to cater with certain students' needs and ability.

### ***1.7.2 Role of the computer***

The first role of computer is based on the model of computer as tutor with focus on drill and practice program (Taylor, 1980 as cited in Warschauer, 1996). Jonassen (2000) stated that traditionally, computer has been used as media for delivering instruction, that is, as conveyors of information and tutors of students. When used in this way, information is stored in the technology. During the instructional process, learners perceive and try to understand the messages stored in the technology as they interact with it. Interaction is often limited to pressing a key to continue the information presentation or responding to queries posed by the stored program. The technology program judges the learner's response and provides feedback, most often about the correctness of the learner's response. Thus, the role of computer as tutor provides students the opportunity to practice on their learning at their own pace and time. However, the role of computer as tutor lacks the opportunity of getting the students to construct their own learning as in the role of computer as tool. Therefore, it is hope that the students have the consciousness to evolve in perceiving computer as tool.

The second role of the computer is as tool (Brierley & Kemble, 1991; Taylor, 1980 as cited in Warschauer, 1996) or, as sometimes called, the computer as workhorse (Taylor & Perez, 1989 as cited in Warschauer, 1996). In this role, the programs do not necessarily provide any material at all, but rather empower the learner to use or understand the programs. Jonassen (2000) argues that computer should be used as tools that help learners to build their own knowledge. To function as a tool, the classroom

computer need only have some useful capability programmed into it such as statistical analysis, super calculation or word processing. Students can then use it to help them in variety of subjects. For example, they might use it as a calculator in mathematic and various science assignments, as a map-making tool in geography, as a facile, tireless performer in music, or as a text editor and copyist in English. The students' acceptance of computer as tool will improve their learning potential and mastery of certain knowledge. Therefore, it is hope that most of the students would perceive computer as tool in which to reflect more effective, authentic and meaningful used of computer.

### ***1.7.3 Computer-Based Learning***

Debevec et al. (2006) stated that CBL offers new learning strategies for students besides the traditional learning methods. The CBL integrates the used of learning technology to introduce, reinforce, supplement and extend needed skills of the students (Williams, 2000). McCarthy (1999) explains that these tasks refer to the stand-alone and networked computers, seemingly endless configurations of electronic multimedia resources, email, the Internet, and increasingly powerful and versatile storage and delivery facilities; and teachers' initiative to integrate the activities of drills, tutorials, simulations, games, problem-solving activities and integrated learning systems coupled with powerful and widely-accepted tools for the management of text and figures, vast data stores, graphics, animation, audio, video and authoring processes. Therefore, CBL is truly an advance learning approach and environment with the enhancement of the latest computer technology integrated within the students learning environment. Four of the specified courses (TMX 1011 End User Computing, TMX2012 IT Tools for Knowledge

Workers, KMP 2023 Mind tools & KMT4023 Computer Applications in the ESL Classroom) are offered to the ESL students.

## **1.8 Conclusion**

In this chapter, an account to the background of the study has been presented and followed by the statement of the problem, research objectives, research questions, significance of the study, limitation of the study and finally definitions of key terms and variables of the study. This chapter gives general overview to the research problem, research objectives and research questions with relation to the ESL students' expectations of the role of computer whether as tutor or tool based on the CBL courses that they attended in UNIMAS.

The following chapter will focus on the literature reviews which reflect on the objectives of the study and conceptual framework. The chapter will cover the definition of concepts or variables, related theories and research findings made to support the relationship between variables.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

This chapter covers the literature review of this research, which gives general information about computer used and integration within the education environment that links the idea to the topic of this research. The review will cover the elements of the history of computer, potential and limitation of computer used and application. This research will give insight of how the computer is being utilized both as tutor or tool in support of the learners learning with reference to the related studies that have been done by other researchers.

The focus of this research is to identify and investigate ESL students' expectations of the role of computer that are being used and integrated while attending CBL courses in UNIMAS, whether as tutor or tool. A review of literature is provided to elicit information and gain insights regarding how the ESL students perceived their CBL.

#### **2.1 Historical Development of Computer in Education**

Since the turn of the 20th century, educators have used various types of technology aids to help them teach and to improve their students' learning (Heinich et al., 2002). Computers have been introduced and used in education since the 1960s. The history of computer application can be divided into three main stages: behaviorist,