ESL STUDENTS’ EXPECTATIONS OF THE COMPUTER

by

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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 keseluruhan mereka meletakkan jangkaan mereka bagaimana 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 (E:SL) 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-
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,