

THE INTEGRATION OF ICT AMONG ENGLISH LANGUAGE (ESL) TEACHERS IN  
PRIMARY SCHOOLS IN SATOK AREA IN KUCHING

by

NORASHIKIN BT KHALID  
(11363)

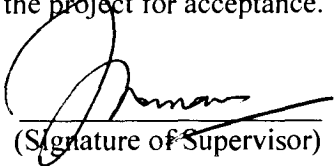
Final Year Project Submitted in Partial Fulfilment of the Requirements for the  
Bachelor of Education with Honours  
(English as a Second Language)  
Faculty of Cognitive Sciences and Human Development  
University Malaysia Sarawak

April 2007

A project entitled  
**THE INTEGRATION OF ICT AMONG ENGLISH LANGUAGE (ESL)  
TEACHERS IN PRIMARY SCHOOLS IN SATOK AREA IN KUCHING**  
was written by Norashikin binti Khalid (11363) and submitted to the  
Faculty of Cognitive Sciences and Human Development  
in fulfillment of the requirements  
for the degree of Bachelor of Education with Honours  
(English as a Second Language)

NORASHIKIN BINTI KHALID  
(11363)

It is hereby confirmed that the student has done  
all the necessary amendments of the project for acceptance.

  
(Signature of Supervisor)

Joseph Ramanair  
(Name of Supervisor)

Date 31-05-07

## ABSTRACT

### **The Integration Of ICT Among English Language (ESL) Teachers In Primary Schools In Satok Area In Kuching**

**Norashikin binti Khalid**

The need to integrate ICT among teachers in teaching and learning is seen by the Ministry of Education as a catalyst to achieve the aims of the National Philosophy of Education and to achieve vision 2020. Due to this, teachers are expected to integrate computer technology as their teaching tool. However, teachers were reluctant to integrate ICT in their teaching due to certain factors. The objective of this study is to investigate some of the factors that influence teachers' integration of computer technology and to identify the existing challenges in integrating computer technology among English Language teachers. This case study involved thirteen English Language teachers from five primary schools in Satok area in Kuching. All respondents were interviewed and only two were observed. Findings from the descriptive statistics revealed that 77% of the respondents were not integrating computer for teaching. All respondents regarded the use of computer only as supplemental to teaching. Lack of training and time factors are the main reasons for not integrating computer technology in teaching and learning.

## ABSTRAK

### **Pengintegrasian ICT di Kalangan Guru Bahasa Inggeris di Sekolah Rendah di Kawasan Satok di Kuching**

**Norashikin binti Khalid**

Pengintegrasian komputer di kalangan para guru di dalam pengajaran dan pembelajaran dilihat sebagai pemangkin oleh Kementerian Pelajaran bagi mencapai objektif Falsafah Pendidikan Negara dan untuk mencapai Wawasan 2020 negara. Maka atas sebab inilah para guru digesa supaya mengintegrasikan teknologi maklumat sebagai alat pengajaran di dalam bilik darjah. Namun, masih ramai juga para guru yang tidak mahu menggunakan teknologi maklumat di dalam pengajaran mereka atas faktor-faktor tertentu. Kajian ini bertujuan untuk mengenalpasti faktor-faktor yang mempengaruhi para guru mengintegrasikan komputer maklumat dan juga mengenalpasti apakah cabaran yang dihadapi oleh guru Bahasa Inggeris. Kajian ini telah dijalankan ke atas tigabelas orang guru Bahasa Inggeris dari lima buah sekolah rendah di sekitar kawasan Satok, di Kuching. Kesemua responden telah berjaya di temubual dan hanya dua orang responden berjaya di buat pemerhatian pengajaran. Hasil kajian menunjukkan bahawa secara descriptif statistic menunjukkan bahawa 77% responden tidak menggunakan komputer di dalam pengajaran. Kesemua menganggap bahawa pengintegrasian komputer di dalam pengajaran adalah tidak penting. Kekurangan latihan dan faktor masa adalah faktor yang paling dominan untuk tidak mengintegrasikan komputer di dalam pengajaran dan pembelajaran.

Demo (Visit <http://www.ijerph.com>)

## ACKNOWLEDGEMENTS

I would like to extend deepest gratitude to my supervisor, Mr Joseph Ramanair for his incredible support, advice, ideas, knowledge, and constructive criticism. Without his assistance, this thesis would never be possible.

My special thanks to all respondents for their willingness to participate and providing information for this study.

I would also like to take this opportunity to express my love and thanks to all my family who had been giving their full support, encouragement, patience and understanding. To my husband, Nazimudden b. Sulaiman Osman and my children Nurdeen and Aziat who had been with me for these long years. Thank you very much for all your sacrifices and hardship that have gone throughout this long journey.

May God Bless all of you.

Norashikin Bt Khalid

2007

Demo (Visit <http://www.pdfsplitmerge.com>)

## TABLE OF CONTENTS

|                               | <b>Page</b> |
|-------------------------------|-------------|
| <b>ABSTRACT</b>               | i           |
| <b>ABSTRAK</b>                | ii          |
| <b>ACKNOWLEDGEMENTS</b>       | iii         |
| <b>TABLE OF CONTENTS</b>      | iv          |
| <b>LIST OF TABLES</b>         | x           |
| <br>                          |             |
| <b>CHAPTER 1 INTRODUCTION</b> |             |
| 1.0 Introduction              | 1           |
| 1.1 Background of the Study   | 1           |
| 1.2 Statement of Problem      | 5           |
| 1.3 Research Objectives       | 8           |
| 1.4 Research Questions        | 8           |
| 1.5 Significance of the study | 8           |
| 1.6 Definition of terms       | 10          |
| 1.6.1 ICT in Education        | 10          |
| 1.6.2 Integration             | 11          |
| 1.7 Conclusion                | 12          |

## CHAPTER 2 REVIEW OF THE LITERATURE

|       |  |    |
|-------|--|----|
| 2.0   | Introduction   | 14 |
| 2.1   | ICT in Education   | 14 |
| 2.1.1 | Learning Theories  | 16 |
| 2.1.2 | Computer as a Tutor  | 19 |
| 2.1.3 | Computer as a Tool   | 22 |
| 2.1.4 | Various tools or applications  | 23 |
|       | Word Processing in teaching and learning                             | 24 |
|       | Spreadsheets in teaching and learning                                | 27 |
|       | Presentation Software in teaching and learning                       | 29 |
|       | PowerPoint   | 29 |
|       | Multimedia   | 30 |
| 2.2   | Integration  | 31 |
| 2.3   | Factors affecting teachers' integrating ICT in teaching and learning | 40 |
| 2.4   | Challenges to ICT integration  | 43 |
| 2.4.1 | Teachers' attitudes  | 44 |
| 2.4.2 | Teacher training   | 45 |
| 2.4.3 | Availability of hardware and software                                | 47 |
| 2.4.4 | Time factor  | 48 |

|     |   |    |
|-----|---|----|
| 2.5 | Related studies on the integrating of ICT | 49 |
| 2.6 | Conclusion                                | 52 |

### **CHAPTER 3 RESEARCH METHODOLOGY**

|       |                             |    |
|-------|-----------------------------|----|
| 3.0   | Introduction                | 53 |
| 3.1   | Research Design             | 53 |
| 3.2   | Population and Sample       | 54 |
| 3.3   | Data Collection Instruments | 56 |
| 3.3.1 | Semi-structured interview   | 57 |
| 3.3.2 | Observation                 | 59 |
| 3.4   | The Pilot Study             | 60 |
| 3.5   | Reliability and Validity    | 61 |
| 3.6   | Data collection procedure   | 62 |
| 3.7   | Data collection schedule    | 63 |
| 3.8   | Data analysis               | 64 |
| 3.9   | Conclusion                  | 65 |

### **CHAPTER 4 DATA ANALYSIS, FINDINGS AND DISCUSSION**

|     |              |    |
|-----|--------------|----|
| 4.0 | Introduction | 66 |
| 4.1 | Findings     | 66 |



|     |  |    |
|-----|--|----|
| 4.2 | Demographic Information  | 67 |
|     | 4.2.1 Discussion   | 68 |
| 4.3 | Semi-Structured Interview  | 69 |
|     | 4.3.1 Discussion   | 72 |
| 4.4 | Observation  | 75 |
|     | 4.4.1 Observation 1  | 76 |
|     | 4.4.2 Observation 2  | 77 |
|     | 4.4.3 Discussion   | 78 |
| 4.5 | Research objectives  | 80 |
|     | 4.5.1 Factors that influence teachers' integration<br>of computer technology in the classroom. | 80 |
|     | 4.5.2 Discussion   | 81 |
|     | 4.5.3 Challenges in integration of computer technology<br>among teachers                       | 82 |
|     | 4.5.4 Discussion   | 83 |
| 4.6 | Conclusion   | 85 |

## **CHAPTER 5 CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS**

|     |                      |    |
|-----|----------------------|----|
| 5.0 | Introduction         | 86 |
| 5.1 | Summary of the study | 86 |

|                   |                                      |     |
|-------------------|--------------------------------------|-----|
| 5.2               | Implications                         | 88  |
| 5.3               | Recommendations for further research | 88  |
| 5.4               | Conclusion                           | 89  |
| <b>REFERENCES</b> |                                      | 90  |
| <b>APPENDIX A</b> |                                      | 96  |
| <b>APPENDIX B</b> |                                      | 97  |
| <b>APPENDIX C</b> |                                      | 98  |
| <b>APPENDIX D</b> |                                      | 99  |
| <b>APPENDIX E</b> |                                      | 102 |

*Demo (Visit <http://www.pdfsplitmerger.com>)*

## LIST OF FIGURES

| Figure |   | Page |
|--------|---|------|
| 1      | Integrating educational technology into teaching  | 17   |
| 2      | Word Processing in teaching and learning  | 24   |
| 3      | Spreadsheet in teaching and learning  | 27   |
| 4      | Presentation software in teaching and learning  | 29   |
| 5      | Stage for ICT development   | 33   |
| 6      | Welliver's Instructional Transformation Model   | 35   |
| 7      | Sandholtz et.al. Model  | 36   |
| 8      | A curriculum framework for integrating ICT and pedagogy<br>in professional teacher education programmes | 41   |
| 9      | A map of Satok  | 55   |
| 10     | Data collection procedure   | 63   |
| 11     | Data collection schedule  | 64   |
| 12     | Demographic information   | 67   |
| 13     | The Extent of Computer Technology   | 69   |
| 14     | Teachers Readiness of Computer Technology   | 71   |

# CHAPTER ONE

## INTRODUCTION

### 1.0 Introduction

This chapter is an introduction to the study and discussion on the current issues of the integration of ICT among English Language teachers in Primary schools in Satok area, in Kuching. This chapter consists; the background of the study, the statement of problem, the research objectives, research questions, the significance of the study, and the definition of terms.

### 1.1 Background of the study

The latest advancement in computer technology enables computer users around the world to have access to unlimited information. Realizing significant roles and potential of ICT in commerce, economic, and education makes the Malaysian government to formulate an appropriate program based on the vision and goals of the country.

Malaysia's decision for change is to transform the country from the industrial economy nation to becoming a leader in the Information and Communications Technology (ICT) Age. Its long vision is referred to as "Vision 2020" and calls for sustained, productivity-driven growth, which will be achievable only with a

technologically literate and critically thinking workforce prepared to participate fully in the global economy of the 21st century. (Chan & Foong-Mae, 2002).

Information and communication technology especially in teaching and learning process is important in helping students learn to think in meaningful ways. Due to the rapid changes in ICT, it also gives an impact to the education field. Hence educators, parents and students today believe that computer should be an integral part of education.

Today computer is used not only for entering and retrieving data, manipulation of text, images, sounds and video in electronic format, but could also provide potential in teaching and learning. It helps teachers to teach effectively and efficiently in the classrooms such as enabling them in accessing information and interpreting, organizing and representing personal knowledge (Jonassen, 2000).

Realizing the importance of computer technology in education, the government, in 1997, had initiated the Smart School Flagship Application. It was launched by the Prime Minister as one of the Multimedia Super Corridor's Flagship Applications. According to Chan & Foong Mae, (2002) the aim of these Smart Schools is to help the country to achieve the aims of the National Philosophy of Education and to achieve vision 2020.

Due to this, the education system has to be transformed and ICT will act as a catalyst for this transformation. According to the Ministry of Education, in the Malaysian Smart School Conceptual Blueprint (1997: pg 9) transforming the

educational system entails changing the norm and act as a quantum leap to the culture and practices of Malaysia's primary and secondary school teaching style, moving away from memory-based learning to an education that stimulates thinking and creativity, to cater to individual differences as well as learning styles and is based on more equitable access.

The Ministry of Education had formulated three main policies for ICT in education particularly for Malaysian education contexts.

- The first policy acts as an enabler to reduce the digital gap between the schools.
- The second policy emphasizes the role and functions of ICT in education as a teaching and learning tool, as part of a subject, and as a subject by itself. Apart from that it also uses as a teaching and learning tool, which stresses the use of the computer for accessing information, communication, as well as a productivity tool.
- The third policy emphasizes using ICT to increase productivity, efficiency and effectiveness of the management system. ICT will be extensively used for organization and management in schools.

(UNESCO, (2004): Malaysia Vision 2020 Smart School)

These three policies are seen as an enabler or means to prepare all students and educators to become computer literate that could reduce the digital gap in terms of acquiring knowledge. This also would create a new method or feature of learning such as self-paced, self-accessed and self-directed learning as well as life-long learning process to society which can be facilitated via computer technology. Apart

from that, these policies also act as the methods that enable more information gathering, efficient management, and effective communication in various forms. These could increase the productivity in education.

To realize these policies, the ICT skills need to be embedded in the curriculum and implemented in the teaching and learning. These skills have been emphasized in Section III Curriculum Specification (2003) apart from the thinking skills and multiple intelligences.

The needs for ICT inclusion into curriculum is in line with globalization in the ICT Age, where skills relating to ICT are incorporated in the learning outcomes. These skills have been added to cater for schools that have ICT facilities. These skills include the use of Microsoft Office which include Microsoft Words, Microsoft Excel and Microsoft PowerPoint, multimedia resources, Internet resources as well as the utilization of computer-related activities such as e-mail activities, networking and interacting with electronic courseware (Curriculum Specification, 2003).

In achieving the aims of the National Philosophy of Education and the Smart School, The Teacher Education Division of the Ministry of Education is responsible to plan the training for the pre-service and in-service of Smart School teachers. This brings ICT into classroom teaching compulsory for all smart school teachers since 1999. (Ministry of Education, 1997: pg 10)

To date, to cater the schools with ICT facilities and to support classroom teaching and learning in schools, the Ministry of Education uses three models of

technology (Level A, Level B and Level B+) to indicate different model of classroom and lab for the Smart Schools Pilot Project. According to Chitravelu et.al. (2006), the Full Classroom Model (Level A) has been equipped with 520 computers and 5 notebooks which consists of 4 computer labs with 35 computers each, 40 classrooms with 7 computers each, science labs with 7 computers each, the other computers are placed in the resource centre, the teachers' room, and the administrative office. Laboratory Model (Level B) has been equipped with 37 computers and 2 notebooks where 21 computers are placed in a computer lab and the other computers in the resource centre and the administrative office. The Limited Classroom Model (Level B+) consists of 81 computers and 2 notebooks where 15 classrooms and science labs with 6 computers each, the other computers in the resource centre and the administrative office.

The Ministry of Education appreciates ICT as a means which could benefit the teaching and learning process. Hence, the government through the 9<sup>th</sup> Malaysia Plan has increased the allocation for the ICT related programmes to 12,889.9 million ringgit compared to 7,885.1 million ringgit in the 8<sup>th</sup> Malaysia Plan (Prime Minister Department, 2006: pg 154).

## **1.2 Statement of problem**

Since the first stage of computerisation programme was implemented in November 2000, many aspects need to be looked into in order to enable the successful implementation of ICT in learning and teaching to take place in schools.



For this reason, many studies have been carried out in elementary and secondary schools on ICT.

Based on a study done by Robinson & Zaitun (2005) ICT integration is rarely carried out. Not all teachers who are trained in ICT are able to implement what they have acquired from the training. Apart from that, infrastructure, insufficient courses and training, poor ICT skills of teachers, poor support from administrators and individual attitude also among the constraints that lead to why teachers did not integrate computer technology in their teaching.

According to the Education Minister Datuk Seri Hishammudin Tun Hussein, teachers in schools use computer not only for teaching but also for other task such as organizing student' data. It is more important for teachers to concentrate on their core business which is teaching. (Star, August 3, 2005). Based on the information from Star Online on June 18, 2006, the Education Minister has appointed a group of auditors to schools to identify the weaknesses of the implementation part of ICT in schools.

For teachers who are involved with ETeMS (English for the Teaching Mathematics and Science) programme, lap tops have been supplied to schools but teachers are not utilizing them properly. According to Chong et al. (2005) in a study which involved 111 teachers, 64.9% of the respondents had not received training and 33.3% require training on how to integrate ICT into their teaching. This indicates that the Ministry of Education should ensure that the training and professional development plan is sufficient to train all education personnel at all levels.

On other issue, some of the courses attended by teachers do not provide a connection between the available potential to exploit the technology towards the learning of second language. Apart from that, the scopes of the skills that teachers learn from the course are also limited and minimal. Chong et al (2005) found that 59.5% of the respondents needed a combination of various types of training on how to integrate ICT into Mathematics teaching. As a result, appropriate training on the use of Microsoft Word, Microsoft Excel and Microsoft PowerPoint should be given to all teachers at on-going basis. Those who have mastered the basic skills should be given opportunities to go for more advanced training (Robinson & Zaitun, 2005).

Although teachers agreed on the potential that computer technology could offer in education, however the full potential of the computer is not being exploited. The reality is that computers are most often employed to supplement traditional classroom pedagogy and have not been fully integrated into classroom learning activities (Ginsberg & McCormick, 1998).

Robinson & Zaitun (2005) also identified that there are teachers who have been trained on appropriate ways of integrating ICT tools in classroom teaching and learning activities and know how to integrate ICT tools in the classroom nevertheless they refuse to integrate ICT in their lessons.

This shows that computers in schools are under-utilized and not being implemented in a very effective way. For that reason, study needs to be carried out to identify what are the factors for this problem. Therefore, the main aim of this study is to investigate the factors that influence teachers' integrating computer technology in

the classroom and to identify the existing challenges in integrating computer technology among teachers.

### **1.3 Research objectives**

The study aims to:

- To investigate the factors that influence teachers' integration of computer technology in the classroom.
- To identify the existing challenges in integration of computer technology among teachers.

### **1.4 Research questions**

It is hoped that this study will address the following research questions:

- To what extent do teachers integrate computer technology in the English language classroom?
- What factors contribute to teachers' readiness to integrate computer technology in the English language classroom?

### **1.5 Significance of the study**

Teaching and learning approach today need to progress with the vast changes of technology. Computer technology also plays its role in transforming how the subjects are taught today. This issue has created a great deal of interest by those

concerned with this field. There has also been a growing literature examining the ways information technology is introduced into curriculum (Jonassen, 2000; Warscahuer, et.al., 2000).

To date, little research had been carried out on computer integration in the primary schools, particular in Satok area. To mention a few, Chong et.al (2005) had carried out a study on The Use of ICT in Mathematics Teaching, while Robinson & Zaitun (2005) had conducted a research on ICT Utilization and Integration of ICT tools in promoting English language teaching and learning in Kuala Langat District. However, both studies were using quantitative research to approach the scenario.

This study hopes to investigate the factors that influence teachers' integration of computer technology in the classroom and to recognize the existing challenges in integration of computer technology among teacher. By identifying the most dominant factor that contributes to the teachers' usage of ICT in teaching and learning, the Ministry of Education and educationalist can use this information to investigate the weaknesses of the implementation part of ICT in schools. The findings of this study can be used to investigate a new scenario and this will enrich the knowledge in this area.

It is also hoped that this study will be able to find out some obstacles or barrier faced by teachers in particular area of this study in integrating ICT in instruction. This first hand information will serve as a valuable source of information for relevant parties concerned to understand ICT problems in education and help formulate a better solution and approach to the said matter.

## **1.6 Definition of terms**

### **1.6.1 ICT in education**

'ICT' is the abbreviation of Information and Communication Technology'. In terms of education, ICT functions as (Moonen & Kommers, 1995; Pilot, 1998) in Jager & Lokman(1999):

- **ICT as an object**

This refers to learning about ICT. In other words students learn ICT as a subject where they need to acquire the skills for their future use. Education is expected to prepare students for the use of ICT in further studies, future occupations and social life.

- **ICT as an assisting tool**

ICT is used as a tool for collecting data and documentation, communicating and conducting research and so on.

- **ICT as a medium for teaching and learning**

This refers to ICT as a tool for teaching and learning itself, the medium through which teachers can teach and learners can learn. It appears in many different forms such as drill and practice exercises.

- **ICT as a tool for organization and management in schools**

It refers to the used of ICT for carrying out tasks related to school management and storing information related to the students' learning progress.

ICT in Education can play various functions and is increasingly important in learning environment. ICT functions should be an integral part of teaching and learning. In relation to this study, the focus is on ICT as a medium for teaching and

learning because it is very significant to ICT in education. To an extent, this function if integrated successfully may well lead teachers to computer integration. Computer integration will not be completed without one of these functions. Therefore, ICT in education refers to a means that serves as a basic function for efficiency to computer integration.

### 1.6.2 Integration

According to Pisapia (1994) technology integration refers to “the use of learning technologies to introduce, reinforce, supplement and extend skills.” Roblyer et.al. argues that:

“In perhaps the most important – and the most difficult – challenge, teacher can help to improve existing conditions or to create important educational opportunities that did not exist without IT. As part of the process, teachers decide what they need to make these changes occur. This process of determining where and how technology fits is known among users of educational technology as integration”

(Roblyer et al: 1997: p.g 2)

From the definitions above, we can conclude that ICT integration is a process where computer technology should be integrated to explore the learning content and will contribute to effective instructional practices. Here, teacher plays a major role in determining where and how technology could be utilized in teaching and learning. It also incorporates computer technology and other media appropriately which involve not only the process of designing effective instruction but also infusing technology as a tool to enhance the learning content area so that it meets students’ learning need.

Hence, eventually it could serve to guide, expand and enhance learning objectives where the focus is on curriculum and learning.

Thus, integration is not about technology use in teaching and learning, but rather how the technology is integrated. It is an approach where students learn by applying the computer technology to a task rather than being directly “instructed” by the technology. According to Roblyers (2004) integration of computer technology is where the focus must be on how the technology resources is being used in the classrooms, rather than just technical skills. It must go beyond information retrieval or content area which teacher and textbook could not provide. It must allow new knowledge and learning experience where learning is not possible without them. Hence, when computer technology is properly employed, it would engage not only deep thinking skills and problem solving in teaching and learning but also could improve the pedagogy.

## **1.7 Conclusion**

The concept of ICT in education in Malaysia is seen as a tool to enable information gathering, access and communication in various forms. This is to prepare and develop the potential of individuals in a holistic and integrated manner, apart from to produce individuals who are intellectually, spiritually, emotionally, and physically balanced and harmonious. For this reason, teachers play an important role in the learning environment.

Therefore, they need to integrate technology in their teaching and learning because it could offer effective and meaningful teaching and learning. It will also help them model the use of computer technology to their students (Hasselbring, et al., 2000; 1997).

Having looked at the discussion in this chapter, a review of the literature relating to this study is presented in Chapter 2.

*Demo (Visit <http://www.pdfsplitmerger.com>)*