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## **USING COMPUTER AND ICT EQUIPMENT FOR E-TEACHING AND E-LEARNING: ISSUES AND CHALLENGES FACING TEACHERS**

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**ABSTRACT:** Integration of computer and Information Communication Technology (ICT) in education has changed the conventional method of “Chalk and Talk” to “e-Learning and e-Teaching”. While ICT equipment has provided opportunities in open access to a wide variety of digitalized teaching- learning materials as well as speeding up communication and sharing of views among educators, it is yet to reach the desired level due to the current issues and challenges. This study analyses the challenges and issues faced by teachers in public primary schools while using computer and ICT-based teaching equipment in their daily classes. Three hundred (300) teachers in public primary schools in Kuala Selangor district of Selangor, Malaysia, were used as the sample for this study. A self-developed questionnaire which contains 4 different sections including (1) Background of Respondents, (2) The level of computer skills and use of ICT, (3) Barriers on the Use of Computers and ICT, and (4) Suggestion to overcome the barriers was used for data collection. Descriptive statistic and correlation analysis were used for data analysis. The findings indicate that computer and ICT operating skills of the teachers are still in satisfactory stage. Teachers tend to use computer and ICT for their own use rather than uses for teaching and learning process. Time, attitude, training and facilities were found to be among the main influential factors in ICT usage by the teachers. Suggestions to overcome the issues and challenges had been also included in this study that is significant in educational management especially managing ICT in schools.

**Keywords:** ICT integration, E-teaching & E-learning, Primary education

### **INTRODUCTION**

Nowadays, Information and Communication Technology (ICT) has become an important part of the most organizations including those in education. ICT refers to the study on use of computers, the Internet, video, and other technologies as a subject in schools (Oxford Advanced Learner’s Dictionary). The term “ICT” was first introduced to education system over two decades ago and since then its rapid growth has become one of the most important topic discussed by scholars. This is due to the potential of ICT to support education and create opportunities to enhance the quality of teaching and learning outcomes (Bingimlas, 2009; Hussain et al., 2011).

Today, ICT literacy is the prerequisite for the 21<sup>st</sup> century’s appropriate knowledge and skills. This is due to the fact that through ICT, one can explore useful information to be able to overcome the modern life’s obstacles. The rapid global technological advancement and development of ICT has placed traditional teaching and learning to *e-teaching and e-learning*. In this regard, using computer has shift teaching and learning process into a more challenging profession, where teachers are required to integrate ICT in their daily classes instead of using only the traditional teaching-learning methods (Hamidi et al., 2011). Accordingly, e-Teaching and e-Learning techniques are preferably replacing the traditional method of *Chalk and Talk* with the intention to make the teaching and learning environment more interactive and proactive.

The other advantage of ICT integration in education system is to enhance teaching and learning quality and accessibility as well as cost-efficiency of the delivery of education. Moreover, using ICT in education also will

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help in networking of the learning communities with the aim of being equipped to face the challenges of global competition (Bruniges, 2003, p.1). In addition, the main benefit of the modern technologies is to offer relevant tools and equipment that can be used in daily classrooms to improve teaching–learning process (Lefebvre, Deaudelin & Loiselle, 2006).

Integrating ICT in education system does not mean that computer is able to replace the teachers completely, but it means using computer tools, equipment, and applications as an enabler to help the teachers to improve students' learning and better pedagogical practices. In this regard, ICT can be used to deliver information to students in order to help them to complete their learning tasks. If modern technologies integrated with the conventional methods, it will then results in a robust and effective outcome for teaching and learning process. Moreover, learning technologies help students to develop their skills, while boost up their motivation and widen their knowledge (Bransford, Brown & Cocking, 2000; Grabe & Grabe, 2007).

However, as the first stage of formal education, primary level of schooling is important and using ICT in teaching and learning can help students and teachers to develop their competencies that are needed for the global society. This is because “by teaching ICT skills in primary schools, the pupils are prepared to face future developments based on proper understanding” (Grimus, 2000, p.362).

### **ICT Integration in the Malaysian Education System**

During the past decades, there has been a growing interest, attention and investment towards the use of ICT in education system globally. Similarly, the integration of ICT into the education system has been one of the major attempts by the Education Ministry of Malaysia in the recent years. This is because ICT offers new potentials that lead to significant changes in the educational organization. Moreover, promoting new technologies and innovative changes to power national competitiveness is a growing challenge to higher education in Malaysia (Hamidi, 2011; Aida Suraya, 2009; Hussain et al., 2011). Correspondingly, to achieve the country's aspiration of Vision 2020, higher education institutions face the challenge to train and educate “competent, productive and knowledgeable” human resource (Malaysia, 2001, p. 8). This is in order “to transform the nation into a progressive economy capable of “sustaining high economic growth “(p. 7), and “to meet the impact of globalization and peruse “environmentally sustainable development to reinforce long-term growth” ( p. 8).

In the previous five-year plan for the year 2006-2010, the new ICT policies have been launched by the Ministry in order to bring technological change to the Malaysian education system (Banjunid, 2001; Puteh & Vicziany, 2004; Suhaimi et al., 2007). These policies were included to ensure ICT accessibility and literacy for all students, prioritizing the ICT's role and function as a teaching and learning tool in education, and ensuring the use of ICT to enhance productivity, effectiveness and efficiency in management system (Ministry of Education, 2006).

Recently, the element of ICT has been included as one of the main transformation shifts in the Malaysia's latest *Education Blueprint* so called ‘MEB’ for the years 2013-2025 as the national education future development focus. It was first introduced by the Ministry of Education Malaysia on September, 2012. The plan outlines 11 shifts needed to transform the Malaysian education system on par with systems owned by developing countries. The program will be implemented in phases, which will be in 3 phases for a period of 13 years. The program is more on the development of teachers and students in terms of access, quality, equity, solidarity and efficiency.

The transform shift of ICT named as "Leverage ICT to Scale up Quality Learning across Malaysia" emphasizes three aspects:

- i) By 2013, the government aims to establish and provide more internet accessibility in the national schools to create virtual learning environment via education development programme called “1BestariNet” for all 10,000 schools
- ii) Augment online best practices content starting with video library of best teachers delivery lessons in critical subjects in 2013
- iii) Maximize the use of ICT for distance learning and self-paced learning to expand capacity of learning outcome and allow for more customized learning requirements

Under the ICT transform focus (The seventh shift), the MOE is trying to strengthen ICT capacity in different stages to enhance the quality of teaching and learning in the country. Accordingly, the use of ICT among teachers should be optimized so that they can make a difference in the quality of teaching and learning in their schools. This is due to teachers' key role in motivating and encouraging students to utilize ICT in their learning process.

In the first wave of reform, the Ministry reviews the current ratio of teacher-student for ICT devices allocations, ICT innovations on distance learning to determine the best suggestion to give the Malaysian students access to the full spectrum of the curriculum and achieve the best outcome of their learning. While for the second wave of reform, the Ministry of Education will introduce a few ICT education programs to create interactive during teaching and learning process, culturally-relevant content for indigenous students, and improve the accessibility of online quality learning resources for students included those schools which located in remote areas (Education Blueprint, 2013, Chap 4, pp.13-15).

The intention of government is to upgrade the quality of ICT skills among schools especially school in remote area such as Sabah, Sarawak, and Pahang. Furthermore, it also trying to narrow down the gaps of ICT capacities both in terms of quantity and quality between urban, rural and remote area in whole nation. Moreover, it could enhance the quality of teaching and learning once the quality and quantity of ICT capacities being improve. However, the ICT integrating at different stage or wave in education will be the most challenging task undertaking due to the possibility of failure to achieve the learning target. In addition, it would bring a further widening and even serious of the knowledge gap between students in remote areas and developed city and then creates the deepening inequalities in economic and social for the whole nation (Tinio, 2003).

The Malaysian Education Ministry should handle all the computer services as tools, application and information supply. In this new era, ICT applications become necessary in all dealing. Some teachers provided with laptops and some are not. Is this the reason why teachers never using computer in the classroom teaching? Is ICT facilities in schools are used to the maximum? The finding indicates that the use of ICT in schools is not performed optimally and not showing its effectiveness in accordance with the government's education policy. According to a study carried out by the Ministry in 2012, the use of information and communication technology (ICT) in schools is limited. The study also showed that only one third of teachers regularly use ICT in their classrooms (MEB 2013 - 2025, p. 142). Furthermore, about 80% of teachers use ICT less than one hour a week. The research shows that teachers are more interested in using the traditional method of using books in their teaching and learning process. Hence, the ICT facilities in some schools are not used as effectively and efficiently as they should be. Therefore, it is important to analyze the key factors that contributed to this phenomenon in order to overcome the current issues. Therefore, this study aims to identify key issues and challenges that influence in ICT integration among teachers in schools.

### **Research Objectives**

The objective of this study is:

1. To identify teachers level of computer skills and technique in teaching and learning process in classroom.
2. To identify the barriers in using ICT in teaching and learning in classroom.
3. To identify the way to overcome barriers in computer and ICT application among teachers.

### **Research Questions**

Based on the research objectives, below are the research questions of this study:

1. What is level of teachers' computer skills and technique in teaching and learning process in classrooms?
2. What are the barriers in using ICT in teaching and learning in classrooms?
3. What are the ways to overcome barriers in computer and ICT application among teachers?

Besides research question, five selected hypotheses were tested using Bivariate Correlation in SPSS V.21. Below are five hypotheses tested:

### **The Study Hypothesis**

*Hypothesis 1:* Correlation between the frequency of teacher uses ICT in classrooms and year of employed

*Hypothesis 2:* Correlation between the frequencies of teacher knows computers and its functions and year of employed

*Hypothesis 3:* Correlation between the frequency of teacher knows how to repair own computers and year of employed

*Hypothesis 4:* Correlation between the frequencies of teacher knows how to create teaching aids with computers and year of employed.

*Hypothesis 5:* Correlation test between the frequency of teacher uses internet for their personal purpose and year of employed.

## METHODOLOGY

### Research Sample

Majid Konting (2000) defines population as a set of features which shows the specific measurement on a group of individuals or objects. Individual or object which was observed must have minimal one feature in common between others. First task in sampling is to identify and define specifically the sampled population (Azizi et al., 2007). Population of this research consists of 300 teachers that have been selected randomly from the public primary schools in Kuala Selangor district, Malaysia.

### Research Instrument

The research instrument that were used in this study were survey questionnaire that has been developed and modified by the researchers based on the factors that ;a) Provide ample time for respondents to answering the question, b)The questionnaire was easy to answer because the answer has been provided and c) Save time, energy and researchers expenses. However, the questionnaire is included four parts as follows:

#### *Part A: Background of respondents (5 items)*

In this section the researchers only focused on the demographic variables such as gender, age, race, academic qualification, teaching experience and subject were teaches in schools. Respondents must indicate (✓) in the option they choose. Simple open question should completed by respondents.

#### *Part B: The level of skills and ICT usage (15 items)*

For items in sections B, the statement and the question were created is to find out level of skills and the way teachers apply the ICT in teaching and learning process.

#### *Part C: Barriers in using computer and ICT (7 items)*

Items related to computer and ICT usage were found in part C, where the respondent will choose the barrier that they face to use the computer and ICT. The options given is generalized and mostly mentioned in most of the researches, particularly in Malaysian context.

#### *Part D: Limitation on the use of computers and ICT/ The suggestions and ways to overcome the issues ( 7 items)*

In this section there are seven questions that need to be filled in by the respondents based on their opinion.

### Pilot Study

In this research, a pilot study was conducted on 100 respondents from 5 of the selected schools. Selection of respondent was randomly chosen.

This pilot study was conducted to ensure the instrument for this study (questionnaire) was suitable in term of language and terms that easily can filled by the respondents and the most important was to determine the reliability of the questionnaire. Reliability value of the questionnaire was tested using Cronbach Alpha to show how suitable are the items as a set of questionnaire. Result of the study gives the alpha value 0.91. This shows that the designed questionnaire has the good reliability. According to Rowntree(1981), classifying 0.7 to 1.0 is the best study. This means that the questions can be used for the pilot study.

### Data Analysis

#### *Background analysis*

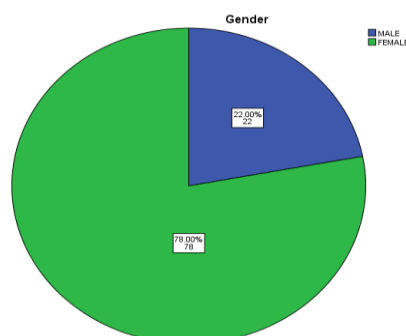
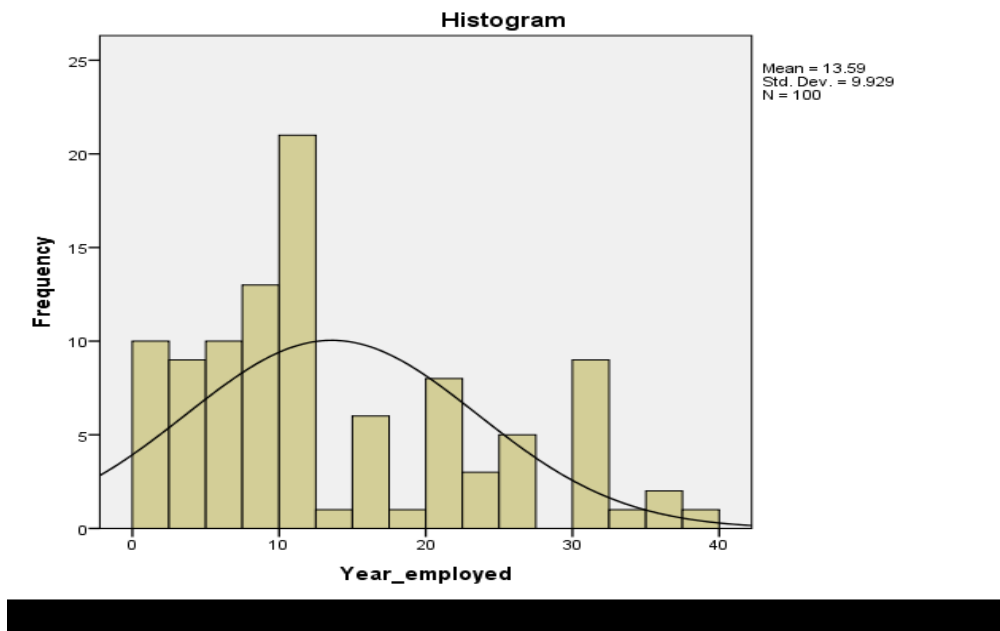


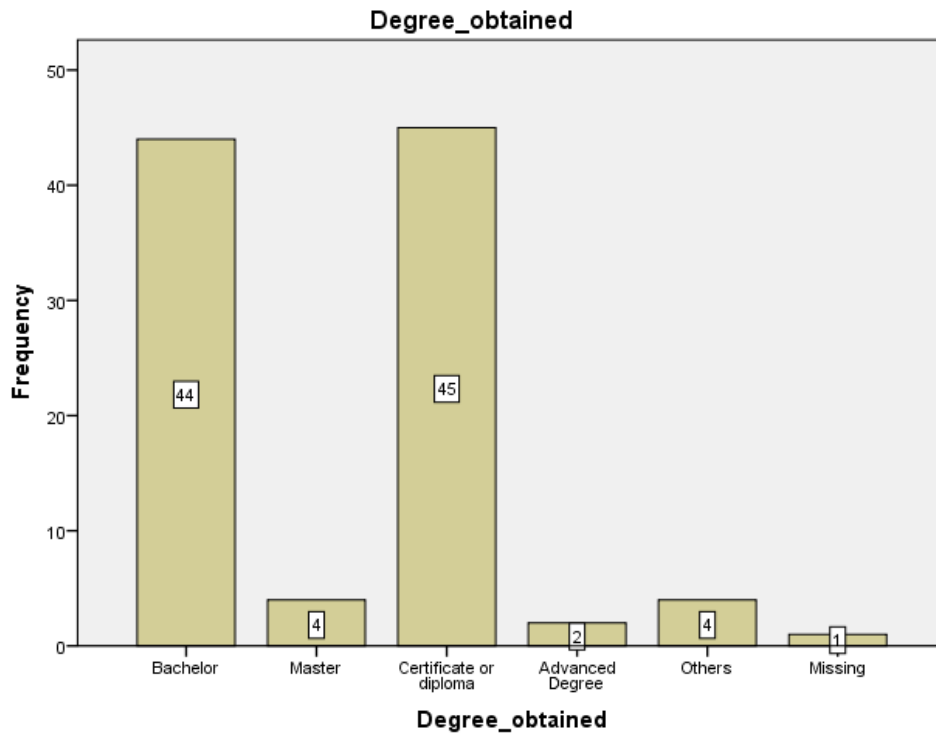
Figure 1.Respondents' Gender Distribution

Figure 1 shows the pie chart of male and female distribution where by 78% of respondents are female and the rest (22%) are male.



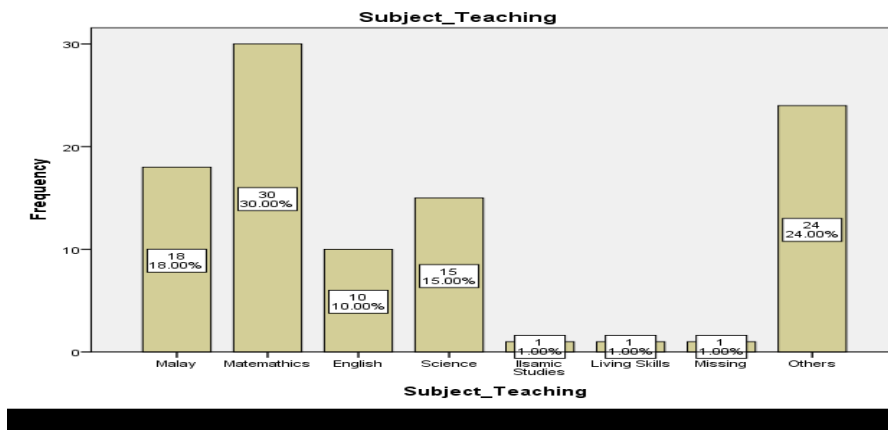
**Figure 2. Respondent's Year of Employment**

Above histogram shows, most of the samples (about 23%) have 10 to 13 years of experiences, with the mean value of 13.59.



**Figure 4. Educational Background of the Respondents**

There were more teachers with Bachelors and Certificate or Diploma. There were no PhD holders and Master holders were very rare in schools especially in primary level.



**Figure 4. Frequency by Subject Teaching**

About 30% of teachers teach Mathematics and only 1% is teaching rare subjects like Islamic studies and Living Skills.

**Table 1. Frequency (%) And Mean Table for Skills in Using Computers and ICT**

Item	Statement	SD	D	NS	A	SA	Mean
B1	I know computers and its functions	0	1	45	49	5	3.58
B2	I repair my own computer	0	3	48	38	11	3.57
B3	I install software on my own	0	10	23	38	28	3.90
B4	I search teaching aids from internet	3	12	36	37	11	3.47
B5	I use computer to prepare lesson plan	0	7	32	47	14	3.68
B6	I can create teaching aids with computers	3	9	54	29	5	3.24
B7	I can construct a learning web site	3	9	43	39	5	3.40
B8	I prepare notes for my students with internet	4	31	41	22	2	2.87
B9	I find questions for my students from internet	2	14	43	35	6	3.29
B10	I always use computer in my classroom	2	50	39	7	2	3.63
B11	I always look for latest additional information through internet	1	49	40	8	2	3.66
B12	I use internet lively in classroom	1	5	14	63	15	3.98
B13	I use internet in computer lab with my students	3	1	28	51	15	3.86
B14	I teach my students on how to find information in internet	1	1	28	52	14	4.01
B15	I use internet for my personal purpose	0	9	44	35	8	3.66

**Note:**

1. Strongly Disagree (SD)
2. Disagree (D)
3. Not Sure (NS)
4. Agree (A)
5. Strongly Agree (SA)

Table 1 shows the distribution of respondents by percentage and mean in terms of the frequency and nature use during the process of teaching and learning. Highest mean in the table was 4.01 at item 14 statement in which the majority of respondents agreed that they often teach their students on how to find information in internet for use in teaching and learning in the classroom. The lowest mean is 2.87, for item B8 which means they hardly prepares notes for their students in internet. In addition, a total of 28% of respondents are very sure that they can install their own software. 63% of teachers agree that they use internet lively in their classroom. There are also teachers who say never to use computers for the purpose of teaching and learning which were 50%.

**Table 2. Frequency (%) And Mean Table of Obstacles in Using ICT in Classrooms**

Item	Problems	SD	D	NS	A	SA	Mean
C1	Hardware and software problems often disrupt lessons	0	1	18	59	21	4.96
C2	Not enough time to use ICT	0	1	20	57	21	4.94
C3	I'm more confident without ICT in classroom	0	3	20	59	17	4.86
C4	Insufficient access to the resources	0	5	25	51	18	4.78
C5	Restricts the content of the lessons	0	5	22	55	17	4.80
C6	ICT makes preparing the lessons more difficult	0	2	19	60	18	4.90
C7	I don't know how to use ICT	0	1	18	59	21	4.96

Table 2 shows Frequency (%) and mean for obstacles in using ICT in classrooms. All the respondents agreed that there are problems faced by them in using ICT in classes, which can be known with zero indicator in SD column. More than 50% are agree with all the problem or obstacles faced by teachers in classroom. This can be shown with all the mean is above 4.00. 60% of the teachers felt that ICT makes preparing the lessons more difficult.

**Table 3. Frequency (%) And Mean Table of How to Overcome the Obstacles**

Item	Method	SD	D	NS	A	SA	Mean
D1	Create a special fund for the provision of ICT infrastructure for the teacher.	0	2	53	39	6	3.49
D2	Held information technology courses for teachers.	0	4	54	36	6	3.44
D3	Teachers must be ready to accept the changes the paradigm shift to the use of ICT in T&L.	0	3	39	37	21	3.76
D4	Providing incentives and rewards to teachers who are creative and dynamic.	0	6	45	35	14	3.57
D5	To place an ICT expert in each school	0	6	45	38	11	3.34
D6	CDs and Software for more subjects	0	12	53	26	9	3.32
D7	Counselling for teachers	0	13	49	33	5	3.30

Table 3 shows frequency (%) and mean for how to overcome the obstacles mentioned above. All the teachers are agree with all the overcoming options as no one has ticked ‘Strongly Disagree’. However, most of them are not sure about the efficiency of recommended options, as we can see the ‘NS’ ticked by 54 teachers in item D1. The mean 3.76 indicates that teachers must be ready to accept the changes the paradigm shift to the use of ICT in T&L. Counseling for teachers is least preferred by teachers with the lowest mean (3.30).

**Testing Hypothesis**

**Table 4 (Hypothesis 1). Correlation Test between the Frequency of Teacher Uses ICT in Classrooms and Year of Employed**

Correlations		B10	Year employed
B10	Pearson Correlation	1	-.097
	Sig. (2-tailed)		.338
	N	300	300
Year_employed	Pearson Correlation	-.097	1
	Sig. (2-tailed)	.338	
	N	300	300

There was a significant correlation between the frequency of teacher uses ICT in classrooms and year of employed,  $r = -.097$ ,  $n = 300$ ,  $p > .01$ , two tails. Negative correlation (not strongly correlated) shows, less experienced teachers uses ICT more frequently in their classroom.

**Table 5 (Hypothesis 2). Correlation Test Between the Frequencies of Teacher Knows Computers and Its Functions and Year of Employed**

Correlations		Year employed	B1
Year_employed	Pearson Correlation	1	-.030
	Sig. (2-tailed)		.764
	N	300	300
B1	Pearson Correlation	-.030	1
	Sig. (2-tailed)	.764	
	N	300	300

There was a significant correlation between the frequency of teacher knows computers and its functions and year of employed,  $r = -.030$ ,  $n = 300$ ,  $p > .01$ , two tails. Negative correlation (not strongly correlated) shows, less experienced teachers knows better about computers.

**Table 6 (Hypothesis 3). Correlation Test Between the Frequency of Teacher Knows How to Repair Own Computers and Year Of Employed**

Correlations		Year employed	B2
Year_employed	Pearson Correlation	1	-.079
	Sig. (2-tailed)		.435
	N	300	300
B2	Pearson Correlation	-.079	1
	Sig. (2-tailed)	.435	
	N	300	300

There was a significant correlation between the frequency of teacher knows how to repair own computers and year of employed,  $r = -.079$ ,  $n = 300$ ,  $p > .01$ , two tails. Negative correlation (not strongly correlated) shows, less experienced teachers highly repairs computers.

**Table 7 (Hypothesis 4). Correlation Test between the Frequencies of Teacher Knows How to Create Teaching Aids with Computers and Year of Employed**

Correlations		Year employed	B6
Year_employed	Pearson Correlation	1	-.084
	Sig. (2-tailed)		.404
	N	300	300
B6	Pearson Correlation	-.084	1
	Sig. (2-tailed)	.404	
	N	300	300

There was a significant correlation between the frequency of teacher knows how to create teaching aids with computers and year of employed,  $r = -.084$ ,  $n = 300$ ,  $p > .01$ , two tails. Negative correlation (not strongly correlated) shows, less experienced teachers uses more computers to prepare teaching aids.

**Table 8 (Hypothesis 5). Correlation Test between the Frequency of Teacher Uses Internet for Their Personal Purpose and Year of Employed**

Correlations		Year employed	B15
Year_employed	Pearson Correlation	1	-.102
	Sig. (2-tailed)		.315
	N	300	300
B15	Pearson Correlation	-.102	1
	Sig. (2-tailed)	.315	
	N	300	300

There was a significant correlation between the frequency of teacher uses internet for their personal purpose and year of employed,  $r = -.102$ ,  $n = 300$ ,  $p > .01$ , two tails. Negative correlation (moderate correlated) shows, less experienced teachers are using internet for their own purpose.

## DISCUSSION and RECOMMENDATION

In the recent years, using computer and ICTs tools and applications in schools have brought many positive impact in teaching and learning processes (Hussain & et al.,2011). Hence, ICT integration has become the core of teaching and learning in the 21<sup>st</sup> century as e-teaching and e-learning (Lloyd, 2005). Specifically, integration of ICT in primary school teaching and learning is inevitable that the full advantage of ICT and its great potential to enhance teachers' teaching quality and students' learning achievement should be considered.

The results of this study indicates that although in some schools teachers are using ICT in their classrooms, but there is no doubt that still many teachers who are working in rural schools does not have inhale of skills and knowledge on ICT. Hence they are using less computer and ICT application in their classroom, although, they



have computer infrastructure in their schools. These findings is similar with the result of a study by Shelly (2004), on the relationship between use of computer application and ICT skills.

In line with previous research (Anderson , 2010; Bovee, Voogt, & Meelisen, 2007; Rosnaini et al., 2008 ) this study has emphasis on the importance of skills for teachers to apply computer and ICT in their teaching and learning. In this regard, teachers should take initiatives to enhance their computer and ICT skills. The result of this study shows that while the form of computer application among teachers is in the moderate level, application of computer and ICT in teaching and learning to communicate with students is in the low level. It means that teachers are more tend to use computer to prepare paper works and examination questions, analyzing students' achievement and make notes preparation rather than using it for teaching purposes. Meanwhile, internet usage among teachers to get teaching resources is also in low level. Researchers feel that teachers must master various form of computer and ICT application due to nowadays education system experiencing various technological developments. This idea was supported by Peeraer & Van Petegem (2012) that suggested utilizing ICT in education can help teachers to collect, store, process, distribute and disseminate information faster. This will result in time and cost effectiveness of teaching and learning process.

To increase the use of ICT in schools the Ministry and the school management can perform various steps. One of them is to change the teacher's perception and mentality by providing counseling and lectures. Changes in attitudes and values of teachers needed in the face of new challenges in education (Ambigapathy & Shanthy, 2010b). Principals as school leaders should continue to monitor teaching and learning to ensure that teachers use ICT daily. The school management can also take the initiative to provide teachers with intensive use of ICT in their learning.

Also, the use of ICT in schools can be enhanced by improving the existing infrastructure. It can be done by improving ICT infrastructure, replacing new equipment and ongoing maintenance. The school management should also put ICT infrastructure in a safe place so that teachers ensure the safety of consumers. The management of the District Education Office (DEO) needs to frequently monitor the usability of ICT infrastructure to be repaired or replaced easily. Sometimes the DEO should be ready to provide new infrastructure if the ICT infrastructure in schools has become obsolete and is no longer safe to use.

ICT use can be improved by ensuring that all teachers and officers of ICT are literate. According to Brosnan (2001), if the teachers do not develop basic ICT skills and willingness to experience with ICT is not worth it. Thus, the Ministry of Education (MOE) should provide short-term skills training. Teachers must be trained in the use of new technology to be applied in the classroom (Ambigapathy & Shanthy, 2005). In addition, the MEB (2013 - 2025) strategically outlined to ensure that all teachers ICT literate. Among the regulation was, teachers were required to pass an online diagnostic test by 2014. Those who did not pass this test are required to complete a series of online training modules and reoccupation basic diagnostic tests at the end of 2015.

It is the government's responsibility to ensure the rapid use of ICT in schools is to provide adequate funding. Government should allocate sufficient funds for ICT in the budget after analyzing the allocation of funds to the sector / less important parts. In this case the school authorities should also take the initiative to seek sponsorship from the outside to reduce government spending and increase access to ICT. Next, another proposal to increase access to ICT in schools is to integrate the language and context of ICT subjects. It can be performed by holding competitions in ICT innovation. Also, introduce the development of specific ICT to develop ICT materials that match the language and context. Moreover the integration can be done by setting up ICT applications or to a bilingual trilingual.

In addition, the Ministry should also put an ICT teacher in every school. This way can be implemented by introducing ICT options in Teaching Institutions. This option will be called ICT teacher, similar as the teacher counseling, special remedial teachers there now. They should be trained in ICT not only in handling ICT tools as well but in terms of repairing. The availability of ICT specialist teachers in their schools then can ease the repair and replace equipment is happening quickly. Finally, the public and private institutions can encourage research on the use of ICT in school management. With this the school will recognize the importance of ICT in teaching and learning process in schools.

## **CONCLUSION**

This study found that the mean frequency and form of using ICT among teachers who are working in rural schools remained within the moderate level. Moreover, time constrains become major issue for the teachers to use computer in their classroom teaching. In addition, the mean level of skills among teachers also was in moderate level. This shows that fewer rural teachers were given training and courses associated with the use of computer and ICT. Issues and challenges that arise on the use of computer and ICT in the classroom are related to time factor, training factor and attitude and more. This study also found that there are some rural teachers who are not directly interested in using this advanced technology. It is hoped that all teachers regardless of the place of their service, can change their perceptions on using computers and ICT application to facilitate the process of their teaching and learning.

It is undeniable that the use of computer and ICT tools and application in schools aimed to improve the quality of teaching and learning. By understanding the factors that barriers the use of ICT among teachers, we can make recommendations that are believed to increase the use of ICT among teachers more effectively and efficiently.

Effective use of ICT tools and application in schools will help the government to achieve the aspirations of the latest Education Blueprint (MEB) from 2013 to the year 2025, especially in terms of knowledge and bilingual skills. In this regard, the main goal is to produce students who are competent and skill-full in the current digital era. School management plays a vital role in ensuring the implementation of ICT in classrooms is well-planned and well-organized. School management led by principals and principals' leadership style, are key factors in convincing teachers to use ICT in their daily classroom. Hence, further research on principals' role in ensuring the implication in ICT in daily lessons is suggested. More future studies suggested to be conducted on comparing ICT utilization in schools in rural and urban areas.

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