Factors Affecting Teachers Utilization of Technology in Malaysian ESL Classrooms

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ABSTRACT

Previous studies conducted by researchers show that technology utilization in the ESL classroom indeed aids students in the learning process (Snelbecker 1999). Furthermore, it also ensures that students achieve better results in English Language. Thus, this study was conducted as a stepping stone to help teachers perform better in utilizing technology in the ESL classrooms. This effort will then improve the standards of English in secondary classrooms as they are moving ahead to tertiary level and leading to career pathway where they will apply both theoretical and practical values, (Winkellmann and Meskill 1995). Therefore, utilization of computer advancement in the ESL secondary classrooms has become an important tool to enhance effective teaching and learning in the ESL classroom. Thus it has led to a survey being conducted among 70 samples chosen by the researcher through random sampling among the large population of ESL teachers in Klang Valley, Malaysia. A structured questionnaire was used as an investigation tool to obtain data from the samples. About 70 questionnaires were distributed to the respondents in selected schools in Kuala Lumpur. The questionnaires were self-administered and collected personally by the researcher. Prior to that, a one to one interview session also was conducted once the respondents have finished filling the questionnaire. The raw data obtained through the questionnaire was coded, analyzed and calculated using Statistical Package for the Social Sciences, SPSS version 17. The interview data collected were transcribed and analyzed in order to triangulate the results of the findings obtained. The findings revealed that foundation awareness on what is expected by these teachers regarding technology use in the ESL secondary classrooms. It has been found that some school teachers were forced to use technology in the classroom without giving them some quality time to learn and acquire it in order for them to have a passion to learn how to utilize and apply it without fail and more confidently in their ESL classroom. This study was conducted as an initial effort to help teachers perform the best in utilizing technology in the ESL classrooms rather than neglecting their feelings, needs and effort in blindly trying to compete with the rapid movement of technology in education in this era.

Keywords:

INTRODUCTION

English language is a global language. In Malaysia English language is a second language in schools, organizations and social affairs. Despite so much time and effort, English is still one of the salient issues in the Malaysian ESL classroom as English is often seen as a difficult subject to learn and acquire. In relation to this, it is observed that students were exposed to English language and usage since primary one till fifth form in schools. Hence, teachers of ESL need to play an important role in order to ensure that English language is delivered effectively to students. For the past several years, educational researchers and practitioners, policy makers, parents and the public have been equally concerned about the slow adoption of computer advancement and modern technologies in

schools (Kung, 2002). The utilization of technology in schools has been less than successful. Over the past few years there were massive investment in technology advancement to improve ESL education, but none has had fruitful outcome in the ESL classroom (Cuban, 1986).

The revolution to use computers in ESL classrooms so far did not achieve the goal of utilizing technology in the ESL classroom. Despite, the large investment and increased utilization of computers in schools (Anderson & Ronnkvist, 1999; Becker, 2000a; Cattagni & Farris, 2001). Computers have been found to be unutilized and underutilized in most ESL secondary classrooms (Becker, 2001; Cuban, 1999, 2001; Loveless, 1996; Zhhao, Pugh, Schelden & Byers, 2002).

Although, plenty of debates and arguments pertaining the effectiveness of technology in teaching in the ESL classroom most researchers still believe and agree that technology can be utilized effectively as a cognitive tool in the ESL classroom. Researchers suggest that technology is an excellent medium used in order to enhance ESL classroom teaching and learning (Bruce & Levin, 2001).

On top of that, technology can aid in the classroom setting by encouraging teachers of ESL secondary classroom to enquire, communicate effectively, planning teaching aids and assist students self expressions and opinions (Malinger & Powers, 2002). Researchers also suggested that technology use increases students' motivations and integrates their linguistic progress (Jung, 2006; Warshauer & Meskill, 2000).

Review of the Literature

Research studies in the past decade have shown that computer technology is an effective means for widening educational opportunities, but most teachers neither use technology as an instructional delivery system nor integrate technology into their curriculum.

In general, the research literature on ICT implementation shows that it involves a large number of influencing factors (e.g., Mumtaz, 2000). We can make a distinction between non-manipulative and manipulative school and teacher factors by reviewing several studies on factors that influence teachers' decisions to use ICT. Non-manipulative factors are factors that cannot be influenced directly by the school, such as age, teaching experience, computer experience of the teacher or governmental policy and the availability of external support for schools (Ten Brummelhuis, 1995).

On the other hand, manipulative factors refer to the attitudes of teachers toward teaching and ICT, ICT knowledge and skills of teachers, commitment of the school to the implementation process and availability of ICT support (Ten Brummelhuis, 1995). This paper reviews studies on ICT use by teachers and identifies relevant factors that included and categorized in the framework of Ten Brummelhuis.

Based on all these statements pertaining to the usage and utilization of ICT in ESL classroom teaching, we believe that there will be tremendous revolution in the outcomes towards the achievement of ESL practice in Malaysia. This study explores the factors affecting teachers' utilization of ICT in the ESL secondary classroom.

Statement of the problem

There is a significant relationship between teaching methodology, the process of teaching and technology (Mehlinger & Powers, 2002). Technology utilization whether directly or indirectly indeed gives room for good outcomes towards greater academic development and achievements (Snelbecker, 1999). The study in the field of ESL particularly on the integration in the area of technology and the ESL classroom is underdeveloped. As indicated in the literature, technology integration is one of the most vital developments in education, yet is often missing from the method

and mode of teaching in ESL classroom.

Therefore, to address this gap, this study intends to address the question of what are the factors affecting teachers' utilization of technology in ESL classroom which range from couple of factors such as inadequate infrastructure (Pelgrum,2001) , lack of training and personal expertise as well as weak technical support (Schrum,1999). The researcher believed that these statements cited are obstacles that hinders the contribution to the academic achievement among the students in the Malaysian context and plans to find a solution for it. Therefore, this study aims to identify the factors affecting teachers' utilization of technology in the ESL secondary classroom.

The research questions for this small scale study are as follows:

1. What are the factors affecting teachers in using technology in a language classroom?

2. Is there a significant correlation between teachers' use of technology in the language classroom and the focus that brought about the utilization of technology?

3. Is there a significance difference between the computer competency level among ESL teachers' and the use of technology in the language classroom?

METHODOLOGY

This descriptive survey design was on the whole process purely a quantitative study whereby all the data were quantified. The research was triggered by students' unsatisfactory results in English public examination often and is it related with technology in ESL. Due to this matter of fact, this small scale of study intended to explore the factors affecting teachers 'utilization of technology in ESL secondary classroom in Malaysia. This study used quantitative mode merely based on three variables which ranges from the variable; demographic data, master list of factors affecting utilization of technology in the classroom and factor correlations regarding the utilization. Thus, methods and procedures were presented under the following subheadings; theoretical research design, measurement and instrumentation, sample of study, data collection and analysis of data. The information regarding the study variables were obtained based on the reviewed literature and the dependent variable is teachers' teaching experience while the factors affecting the utilization of technology represented the independent variables.

The researcher identified 8 schools for actual study among ESL secondary school teachers' pertaining factors affecting utilization of technology in the ESL classroom in the Selangor region. The population of schools in Selangor and teachers of ESL secondary classroom is large. Therefore, the researcher only selected several schools from Petaling Jaya and Klang. The schools chosen are easy and accessible for the researcher to deliver, administer and collect the questionnaires distributed personally to avoid time constraint and ensure confidentiality of the instrument. Prior to that, the researcher were able to communicate with some teachers' (samples) and the school principal as well to set a good ground and platform to enhance a good rapport and sound relationship built in order to overcome the barriers and conduct the survey successfully without much hurdles which is common in the process and effort of collecting raw data especially from academicians' who are bottle up with tight schedule in daily basis. Ten samples were chosen from each school prior to the actual study as large sample has a greater tendency to produce valid and reliable results that contributes to this small scale of study.

Questionnaires were used as an instrument in this study particularly. Paper- pencil questionnaires can be sent to a large number of populations. Thus, they may save researcher travel

expenses, and postage is typically cheaper than lengthy long distance phone call. The social scientist that collects data with a questionnaire and the physicists who determines the presence of radioactivity with a Geiger counter are at just about the same degree of remoteness from their respective sources of data: Neither sees the source from which the data originate. From the perspective of survey participants, this distance becomes an additional advantage: Participants can respond to questions with assurance that their responses will be anonymous, and so they may be more truthful than they would be in a personal interview, particularly when they are talking about sensitive or controversial issues. (Cited in Paul D. Leedey, Jeanne Ellis Ormond, 2005). Questionnaire is valid, clear, and reliable as there are black and white forms used in a survey design that the participants fill in, complete and return to the researcher.

The data supplies basic personal opinions and demographic information about themselves. (Creswell, 2007).Based on these statement, researcher used questionnaire as an instrument in this study. The questionnaire (Appendix B) was divided into three sections. The first section mainly consists of demographic details of the researcher. On top of that,   it includes the purpose of this questionnaire and a token of appreciation to the respondents' co – operation. The second section comprises questions on demographic details of the respondents. The demographic variables used in this study are gender, academic qualification, age, teaching experience and computer literacy.

The details obtained an insight of the educational background and knowledge in computer which gives a room to the research topic which is factors affecting teachers' utilization of technology in Malaysian ESL secondary classroom. The third section comprises of section B, C and D whereby section B represent compiling master list of 30 items the reason of teachers' using technology in class. Whereas, section C has 20 items to examine the factor and factor correlations underlining teachers rating of using technology in ESL secondary classroom using Likert Scales .

A rating scale is more useful when a behavior, attitude, or other phenomenon of interest needs to be evaluated on a continuum of, say, "strongly disagree to strongly agree,", "inadequate to excellent," or "never to always."Rating scales were developed by Rensis Likert in the 1930's to assess people's attitude; accordingly, they are sometimes called Likert Scales. (Cited in Leedy & Ormrod p. 185; 2005). Whereas, section D comprises of open ended questions which allows pondering their response and penning it down. The respondents were required to give their response to the statements

Data Analysis

The data obtained was coded and edited before transferred to computer for data analysis. The findings were analyzed using the Statistical Packages for Social Sciences (SPSS, for window version 17). The first step in the data analysis involved the descriptive statistics, which were the frequency count and percentage, adopted in presenting and summarizing the data as well describe the demographic profile of the respondents.

Table 1: Descriptive Statistics presenting the demographic profile of the respondents

	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Gender	50	1.00	1.00	2.00	1.8000	.40406	.163	-1.547	.337
Age	50	2.00	1.00	3.00	2.2000	.90351	.816	-.415	.337
Qualification	50	3.00	1.00	4.00	1.3400	.59281	.351	2.191	.337
Experience	50	3.00	1.00	4.00	2.6400	1.35164	1.827	-.181	.337
Competency	50	2.00	1.00	3.00	1.9200	.56569	.320	-.025	.337
Valid N (listwise)	50								

The second step in the data analysis involved the reasons of teachers 'using technology in class that was analyzed and presented in the mean score and standard deviation for each item in the questionnaire for the first session and the second session presented factor correlations using factor pattern co efficient.

Table 2: Inferential Statistics showing reasons of teachers using technology in class.

Correlations

		use technology increases my self confidence	Because its convenience I use technology unconsciously	My school principal encourages the use of technology	it is because various techniques are taught during teacher training	many teaching aids fit into technology
use technology increases my self confidence	Pearson Correlation	1	.337[*]	.090	.116	.209
	Sig. (2-tailed)		.017	.533	.423	.145
	N	50	50	50	50	50
Because its convenience I use technology unconsciously	Pearson Correlation	.337[*]	1	-.099	.514[**]	.295[*]
	Sig. (2-tailed)	.017		.492	.000	.037
	N	50	50	50	50	50
My school principal encourages the use of technology	Pearson Correlation	.090	-.099	1	.207	.481[**]
	Sig. (2-tailed)	.533	.492		.150	.000
	N	50	50	50	50	50
it is because various techniques are taught during teacher training	Pearson Correlation	.116	.514[**]	.207	1	.442[**]
	Sig. (2-tailed)	.423	.000	.150		.001
	N	50	50	50	50	50
many teaching aids fit into technology	Pearson Correlation	.209	.295[*]	.481[**]	.442[**]	1
	Sig. (2-tailed)	.145	.037	.000	.001	
	N	50	50	50	50	50

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

Section A and D were analyzed by the researcher own self in order to meet the objective of this study.

FINDINGS

This part demonstrates the findings of the small scale survey study in depth and in relation to the research questions and as well as the research problem. Overall the utilization of technology in the ESL secondary classroom by the teachers' is a good move and reformation but due to some factors these teachers are reluctant to use them confidently in the classroom. It has been said by some teachers that had been interviewed that technology remains a white elephant in most schools but through this survey it is proven that it is not hundred percent (100%) technology is not being utilize at all. There are several factors that limits and hinders the usage of the technology among teachers who has lack of exposure and expertise in utilizing technology due to the level of computer literacy which is a bit low compared to students of nowadays which are extremely good and they are at an advanced level known as techno maniac compared to teachers who have slow adoption towards technology.

Apart from that, at some schools teachers are forced to use technology in the classroom without giving them some time to learn and acquire it in order for them to have a passion to learn how to use it and apply it without fail and more confidently in their ESL classroom. Teachers who are still fresh from Universities are at the great interest and rate in using technology in the classroom because they were given ample of trainings and practice. Therefore, they have more confidence in using them.

Somehow, according to the survey , teachers who are 40 years and above do utilize technology in the ESL classroom because they tend to love the reformation in the education system a lot , they don't find that utilizing technology in the ESL classroom is troublesome or hinders their creativity to be shared with students. In fact, they said there are plenty of interesting teaching aids that can be downloaded and applied in the ESL classroom nowadays. After all everything is fast, convenient and affordable in fact, our Ministry of Education prepares everything sophisticated and up to date for us so why abandoned them , Communicative Language Teaching (CLT) is an essential tool in the ESL teaching and learning but it can always be better in collaborated with Computer Assisted Language Learning (CALL) (Senior Language Teacher SMK ACS Klang).Apart from that, some teachers believe that technology can help teachers to be better eye opener to students because technology encourages self and independent learning whereby teachers acts as a facilitator and teachers can spend and focus more precious time to students individually as the lesson being conducted in the class. Technology helps teachers to get their tasks done effectively and efficiently with the aid of technology in the ESL classroom. Lessons are conducted smoothly and there is no problem with technical problems as long as teachers know how to operate the technological tools then it should not be a problem at all.

It is proven that, of course technology does more good to students and teachers in order to produce a good quality and productive education system in Malaysia as our world is now borderless and wireless so it is indeed vital for a teacher to learn how to us them confidently as teachers job is not only writing on the whiteboard and marking papers but it counts more whereby to teach is to touch a life forever therefore ESL teachers also should be technology expert in order to be a well-rounded teacher that shapes the backbone of the nation.

This study has profound implications for the questions asked by the researcher on information regarding teachers' utilization of technology in the ESL secondary classroom. The findings resulted shows the in acceptance and ineffective belief of school teachers towards technology and the use of computer in the language classrooms .The study implies that there are several factors that are in relation to the use of computer among ESL teachers in the ESL secondary classrooms.

Recommendations for further study

For every limitation there will be a solution as an outcome source. Therefore, for further study a bigger sample size is essential to look at the validity and reliability of the findings and the data can be generalized to the large population of teachers. Apart from that the researcher should plan the time well and give enough time for the participants to answer the questionnaire. Well planned time can avoid participants having limited time to answer accurately the questionnaire. Other than that, the researcher should have prepared a proper schedule to self-administer and well plan the interview session immediately after the participants have answered the questionnaire. Instead of having a one to one interview, a focus group interview can be conducted if the researchers has planned and informed the participants beforehand. The researcher could look at larger scope in the further study whereby the population should not be targeted in Klang Valley only but it should be other states as well as including primary school teachers as well to get better findings. Lastly it is hoped that this recommendation could help to improve the future study in the same field.

CONCLUSION

This small scale of survey study may not show or prove the effectiveness of the factors affecting teachers' utilization of technology in the ESL secondary classrooms. However one thing is pretty sure, as it demonstrates the factors raised by the ESL teachers who took part in this survey. It lays foundation awareness on what is expected by these teachers pertaining the use of technology in the ESL secondary classrooms. This study was conducted as starting effort to help teachers perform the best in utilizing technology in the ESL classrooms rather than neglecting their feelings, needs and effort blindly trying to compete with the rapid movement of the technology in the education in this era. If the dilemma of reluctant and technophobic towards technology prolongs among teachers of ESL somehow it will worsen the scenario and demotivate these teachers to utilize technology in their classrooms. Thus it is believed that this study will be an eye opener for the teachers to accept and fully utilize technology in their classrooms which will aid the teaching and learning of ESL in the secondary school classrooms. If this effort is continually and daily practiced in every classroom, this will definitely be a fruitful outcome towards the utilization of technology in the ESL classroom that could contribute excellence towards students' achievements in English.

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