KNOWLEDGE, ATTITUDE AND USE OF ICT AMONG ESL TEACHERS

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ABSTRACT
Information Communication Technology (ICT) is an important element in the education scenario in order to prepare the citizens for the future. The quality of teaching is often related to the use of ICT in teaching and learning. Hence, the Ministry of Education (MOE) too has implemented various programs to promote ICT. The aim of the study is to explore the knowledge level, attitude and the use of ICT possessed by ESL teachers. This study also investigates obstacles faced by ESL teachers in using ICT. A survey was conducted involving 50 respondents from various primary schools in Port Dickson. The findings revealed that most respondents were knowledgeable in using applications such as MS Word, internet exploring, e-mailing and MS PowerPoint. However, only some had difficulties using applications such as internet browsing. The respondents demonstrated positive attitude towards using ICT as majority of them used ICT for teaching and learning and felt that computer will change the way students learn in classes and also found it effective in students learning. The majority of the respondents (60%) and more revealed that they use ICT to teach computer skills, communicate with colleagues, monitor students’ performance and do presentations. 80% of the respondents stated that they are lacking of time in school to use ICT.

Field of Research: Information Communication Technology, Knowledge, Attitude, Use

1. Introduction
Lifelong education and making Malaysia an education hub had been in the 12th Malaysian plan. In conjunction to that, various programs and education symposiums are held in order to compete with other countries. Nevertheless, Malaysia is doing its very best in achieving its objective. Various kinds of methodology and materials are used in the learning process i.e. virtual learning, e-learning, distance education, blog, face book, e-book, forum and many more. This clearly shows that information and communication technology is part of the education system.

The SMART SCHOOL program which was initiated by the government wanted the school management system and the teaching and learning process to prepare the pupils towards the information age (Smart School Project Team, 1997:20). Therefore, the teachers have to prepare themselves to cater the needs of pupils and the government policies. The use of technology alone will not suffice the significant changes in school. The teachers are the main ingredient in fostering the changes. The KSSR (Kurikulum Standard Sekolah Rendah) curriculum developed and initiated by the government in 2011 is a great stand which demonstrates the importance of ICT in education. The curriculum comprises of ICT has one of the domain that has to be given due importance in teaching. This initiative clearly reveals the significance of ICT is being upheld. Teachers and pupils need to be ICT savvy and further explore in depth via education (KSSR, 2011).

Study by Davies (1997) show that the quality of learning can be greatly enhanced through the integration of ICT in teaching. Research by Bransford (1994) showed that ICT enhances the critical thinking skills, information handling skills, the level of conceptualization and the problem solving capacity. UNESCO Asia and Pacific Regional Bureau for Education in Bangkok designed a project titled ‘Preparing the Next Generation of Teachers Through
The objective of this project was to assist teachers in Asia Pacific region to prepare teachers on how and when to best use the technologies for teaching and learning. This is in line with the vision 2020 that Malaysia uphold.

The Ministry of Education of Malaysia, has initiated the transformation of the educational system in which the ICT has become the central concept in the educational system. The website MySchoolNet was initiated by the MOE in order to increase the use of ICT in education and meanwhile provides links to help teachers and students access educational information readily. In order to achieve success, the government with the help of various agencies had been carrying out on-going training which is relevant for educators. According to Baylor and Ritchie (2002), the amount of technology will not be used unless the members have the skills, knowledge and attitudes necessary for the curriculum.

It has to be noted that research findings over the past 20 years provide some evidence as to the positive effects of the use of information and communication technology (ICT) on pupils learning. Despite such projects, the effects of various programmes and investment by schools in ICT resources, there has been disappointingly slow uptake in schools (Cox, 1999; Passey & Samways, 1997). These findings indicate that there are factors that discourage teachers from using technology, the roles of the teacher in relation to ICT and the effect on pedagogy.

Information and communication technology is a crucial tool that is mostly and widely integrated in the teaching and learning process, especially in the English language. As ICT is commonly used by pupils, teachers too have to use it in their teaching routine. But the question is how well versed are teachers in using this tool, are they confident to use it and what are the challenges they face in using this technology? Many researchers pointed out the ability of computers to support and enhance teaching and learning process in primary education (Loveless & Dore, 2002). However, there are questions pertaining the effectiveness of computers as studies reveal that although the number of computer users is constantly increasing, few individuals still refuse to accept the value of computer technology.

It has to be pointed out at this juncture that, the SMART SCHOOL program was one of its very best that the ministry and government could do for the younger generation. The Multimedia Super Corridor was assigned to cater the needs of the SMART SCHOOL program. However, the program was not carried out as how it was supposed to be. The main content of the program is all classrooms are well equipped with computer and internet facilities. The question is in 2011, how many schools are actually equipped with these facilities? There are very few schools which obtained this infrastructure.

Catering schools with these facilities requires the man power, financial aid, trainers and on-going technical support and experts. Teachers too are lacking in the area of skill. Not all are motivated to use the ICT as they are not well versed and there is no support for them to carry out activities. The most that they could turn around to seek for help are fellow teachers in their respective schools. At times, they too could not solve the problem that sometimes the teacher feels it is troublesome to use it and opt in using the traditional method of teaching and learning.

Currently, most schools are equipped with computer labs and internet connection. Having these infrastructures in schools is a good start in a way. The tendency in teachers left behind in the IT environment could be lessened. However there are fewer teachers who really use these facilities due to some reasons, i.e. skill, knowledge, motivation, attitude and practice. If this situation persists then, obviously the Ministry of Education’s aim will be a waste and moreover, the pupils will be affected too. Researchers and findings had been done in many various institution and the phenomena is still persisting. The need to look at more findings and conclusive recommendations are needed to uphold the ministry’s agenda.

A number of earlier studies investigated the reasons why teachers do not use computers in their teaching (Rosen & Weil, 1995; Winnans & Brown, 1992; Dupagne &
Krendl, 1992) and found a list of inhibitors such as lacking of teaching experience with ICT, lack of on-site support for teachers to use technology, lack of help supervising children when using computers, lack of ICT specialist teachers to teach computer skills, lack of computer availability, lack of time required to successfully integrate technology into the curriculum and obviously lack of financial support.

Evans-Andris (1995) is summarized a version of three styles of computing use among teachers are identified such as avoidance, integration and technical specialization. The sample of the findings involved an 8 year period of in the elementary schools of a large metropolitan area. The teachers in this area distanced themselves from computers and also reduced the amount of time spent attending to computer related activities. Basically these teachers sustained a low level of interaction and in contrast, teachers engaged in integration generally embraced computers.

Further findings from Robertson (1996) indicates that teachers resistance to computer is divided into several broad themes such as resistance to organizational change, resistance to outside intervention, time management problems, lack of support from administration, teachers attitude, personal and psychological factors. The study was carried out on the skills acquired by staff and Year 8 students in a secondary school prior to receiving personal palmtop computers. Access to palmtop computers increased the staffs’ use of generic applications in their work. A minority of staffs remained unconvinced about the potential of the computer and dissatisfied with the amount and quality of professional development in the use of palmtop and in ICT in general. The study in general concluded that there is a need for adequate and careful training so that teachers become aware of the range of uses and possible benefits of ICT.

There has been an exponential growth in the use of information and communication technology which had made great impacts on society and in our daily lives. It is not surprising to find increasing interest, attention and investment put into the use of ICT in the education world. In addition to efforts to employ ICT to improve learning, the emergence of knowledge economy has also brought about a much greater emphasis on education (Felix, 2007). Educational innovations on ICT have been embedded to improve teachers’ skill, knowledge and increase the use of ICT.

The purpose of this study is to investigate what are the aspects of knowledge the ESL teachers are lacking in using the ICT tools. The basis of many findings indicate that teachers are lacking in knowledge but fail to point out what are the knowledge area that has to be focused on. Besides that, how do teachers perceive in using the ICT. In other words are educators motivated to use the ICT infrastructure in school? What hinders them from using it and how often these skills are integrated in their teaching and learning journey? The research will focus on teachers’ knowledge in using the ICT, the attitude of teachers in using the ICT, the use of ITC and the challenges that they face in using the ICT in teaching English Language. There will be definitely some challenges faced by teachers in using the ICT and suggestions to overcome the problem. The objective of the study is to explore the knowledge level possessed by ESL teachers in using ICT, to explore the attitude of ESL teachers using ICT, to explore the level of ICT used for educational purposes by teachers and to investigate the obstacles or challenges faced by teachers in using ICT.

2. Teachers’ Knowledge, Attitude And Use of ICT

The article by Samuel and Zaitun (2007) examines the availability of ICT resources and the level of ICT skills of English Language teachers. The study was done to determine whether serving teachers are able to promote ICT integration in the teaching and learning of English Language in Malaysian schools. The objectives mentioned were to find out if there are adequate IT infrastructure facilities and resources to facilitate ICT integration in the
teaching and learning of English, to investigate if teachers have the right ICT skills in integrating ICT tools in the teaching and learning of English Language and to find out the obstacles that affect the use of ICT resources in classroom teaching and learning. It is important as development of information and communication technology has given a tremendous boost in supporting new modes of delivery in training, teaching and learning. Indeed, ICT tools assist students in acquiring English Language competency as well as enhance the quality of learning experience.

The research was conducted in five districts in Selangor which include Kuala Langat District, Hulu Langat District, Bangsar Area, Taman Dato Harun Area and Taman Melawati Area. A cross-sectional survey had been carried out in both rural and urban areas. The respondents include teachers from primary and secondary schools. The survey was conducted over a period of five months. 109 questionnaires had been completed out of 120 questionnaires which were given out. A pilot study was conducted to a sample of 13 English Language teachers in Sekolah Kebangsaan Olak Lempit, Banting. The primary implication of this research is that more useful ICT resources such as WEBCT, Blackboard 6 and other online formats have been absent in the school environment in Malaysia and should be catered to schools per say in order to improve the ICT infrastructure. The successful implementation of ICT integration in the teaching and learning of English Language needs the full cooperation and support from the school administration, positive attitude of English option teachers, continuous training to update teachers’ ICT skills, training on when, when not and how to use ICT tools appropriately. It is believed by the researcher that a move in this direction would surely result in improved proficiency among school students in the near future and Malaysia will be in a strong position to make vision 2020 a reality. In future the research should focus on pre and post ICT training conducted to teachers and its implication.

A similar research was done by Melor (2007) regarding the Malaysian ESL teachers’ use of ICT in their classrooms: expectations and realities. This study was done among the ESL teachers in technical schools in Malaysia through surveys and semi structured interviews with teachers. The aim of this study was to know the use of ICT, the factors that affect the use of ICT and the teachers’ perception of the ICT skills in teaching. The Davis' Technology Acceptance Model (TAM) was adopted as a basis for determining ICT attitudes and factors affecting the usage of ICT in teaching. The findings indicated that majority of the teachers had positive attitudes towards using ICT in teaching ESL. The teachers expressed that having ICT in the teaching process supports new learning experiences. Besides, many teachers have access to computer at home and have positive effects on teachers’ attitudes to ICT including increased knowledge, confidence and motivation. About 76% teachers identified that they only have access to one computer lab and this is a major obstacle to integrate ICT into teaching and learning. Low quality hardware is also an issue as teachers (75%) find it difficult to search for information on the internet. During the interview session the teachers requested for training and provide expertise to render help with the basic issues and exploring possibilities. Both Melor (2007) and Samuel & Zaitun (2007) findings conclude that ESL teachers have the positive attitude but are still lacking in skills as they are not well versed with many new software and limited infrastructure. Teachers too are lacking in trainings as well as expertise to offer help and guidance to enhance the learning process.

Study conducted by Pramela and Noraza (2007) looked at the challenges that ESL teachers faced in using the ICT in the teaching and learning routine as well as the changes which they need to go through in the new learning environment. A total of nine in service teachers were interviewed to find out their views on ICT and how ICT helps in teaching. All these teachers regarded that ICT is an important and useful tool to help them convey or present their teaching interestingly as pupils look forward to classes conducted with multimedia as compared to traditional and conventional method of teaching. These teachers too have expressed that they need to spend more time in getting prepared to use the ICT as
they are not well equipped with the knowledge and skills required. There was one teacher who stated that the lab is always booked and occupied as there are limited infrastructures in the school premise. The teacher need to find and download the materials as the classroom is not wired. Based on the interview session with these nine teachers, using ICT is definitely a change and it has a positive impact on teaching. However, there are certain setbacks with regard to facilities, acceptance and application which had to be looked into in depth for better results. As compared to research done by Samuel and Zaitun (2007) and Melor (2007), the findings indicate that there is a similar reaction by teachers in integrating ICT in teaching as there are a minority of them who admit that the use of ICT is a hindrance as there is no sufficient infrastructure, less specialist in the area concern to give support and guidance and at times using ICT in teaching is very challenging and tedious. However, Melor (2007) had recommended that the Ministry of Education has to look into adequate access, computer resources, teacher development opportunities, onsite support which requires funding, thought, planning and support to ensure that integration of ICT in schools are a success.

Abdul Rahim and Shamsiah (2008) conducted a survey on 645 trainee teachers where they had to complete a questionnaire. The research design is quantitative. The data collected were analysed using the frequencies, percentage, means, t-tests and ANOVA. The study was done to assess the trainee teachers’ confidence in integrating ICT in teaching. The findings indicate that the respondents are quite confident in using ICT in teaching and their readiness to use ICT shows moderate which is M=3.999 and confident to evaluate the software for teaching purposes which shows M=3.84. The male respondents were found more confident than female respondents. Teachers’ must be challenged in using ICT, where they have to achieve a level of technological competence which enables them to understand and able to meaningfully integrate ICT in teaching. The findings too revealed that there is no significant correlation between academic performance and level of confident in integration of ICT in teaching. This study is found to differ from the other three earlier studies mentioned as it presented the readiness of the respondents in integrating ICT in teaching and the respondents were trainee teachers. However, the other findings are similar to Samuel and Zaitun (2007) and Pramela and Noraza (2007) where the confidence level and attitude towards ICT among the respondents tend to be positive. It has to be noted that findings by Abdul Rahim and Shamsiah (2008) pointed out that the vocational teachers felt more confident in integrating ICT in teaching which is similar to the research done by Melor (2007). The reason is vocational teachers handle technical subjects and their experience enable them to integrate ICT effectively in the teaching.

Teachers’ knowledge is an essential element in imparting knowledge to pupils. Knowledge in ICT is a must among teachers. The central question is, do teachers have the required knowledge of ICT? There are studies which reveal that teachers do not acquire the necessary level of knowledge. Findings by Rosnaini & Mohd Arif (2010) show that a minority group of teachers were knowledgeable in basic ICT. The majority of them only had average knowledge in ICT. There were even a group of teachers demonstrated having very minimal knowledge of ICT. This scenario clearly shows that the key factor in making ICT programs successful in school is to upgrade the level of ICT knowledge among teachers.

A similar study was done by Erdogan (2010). The study comprises of the knowledge level of teachers in ICT use among Turkish teachers. The findings indicated that the most widely used ICT type is the Internet followed by word processing. The mean scores of the responses showed the respondents having close to little information. The results also revealed that teachers had a high level of knowledge about the software but low levels of information on most software. The results also confirmed that teachers have a low level of ICT knowledge and those previously trained about computers had higher level of use than those who did not receive any training. This clearly shows that training is important for teachers. Most teachers tend to use the internet, email, word processing, graphics and presentation software as these
skills are essential for the job scope. However, there are some technologies which require technical knowledge. The study too confirmed there is a significant correlation between the levels of knowledge about ICT and the use of ICT in education. It could be concluded that the higher the level of knowledge on ICT the higher the level of use in education.

Pamela (2006), stated that learners and instructors need appropriate computer skills and knowledge to experience meaningful learning. English teachers need to apprehend the skills and obtain the required knowledge to impart to the language learner has ICT is able to foster information processing ability in which learners will be able to construct their own knowledge and learning. Imparting such knowledge to pupils will promote student-centred learning and also improve individual performance.

Teachers’ positive attitude towards ICT is a must and also an added advantage to the implementation of ICT related programmes. The positive attitude of teachers too will help themselves to receive the input and enable them to impart the knowledge to the students. Positive attitude will be a catalyst to make changes more inviting. The effective implementation of ICT programmes clearly depends on teachers’ readiness and also positive attitudes towards ICT and those who perceive it to be useful in promoting learning will surely integrate ICT more easily (Papanastasious & Angeli, 2008). The teachers’ behaviour and attitude alone will not suffice the function of ICT whereas the surrounding working environment too plays an integral role. Besides, the finding also has determined the frequency of computer use and the confidence in using computer for teaching purposes. The frequency of computer use have significant effects on the successful integration of ICT in the classroom as the teacher is more familiar with the technology and at the mean time provide higher levels of support to each other.

The findings further stated that computer anxiety is also another reason why teachers are not willing to use the technology in classroom. Most of them are aware that the pupils are more advanced than them in handling technology and software tools. This puts the teachers off and prefers to use the methodology that is conventional and belief it is useful to the students. It has to be noted at this point, that there is only a minority of teachers who have this fear in them. Another research by Lau & Yeoh (2008) revealed that, attitude is crucial and the findings showed that females are more diligent in seeking information related to academic learning. Female teachers are more positive in receiving and promoting ICT. A study was conducted on pre-service teachers in Malaysia (Wong, 2005) highlighted teachers must have affirmative attitude toward ICT and the use of technology effectively in their teaching.

A pilot study towards the effectiveness of utilizing ICT in enhancing language learning process by Hafizah et.al. (2006) revealed that developing positive attitude towards language learning is not an easy task but certainly could be achieved with more effort. The survey results portrayed that manipulation of ICT in language classes does help pupils to develop positive attitude towards language learning and at the mean time motivates students to gain interest in the learning. It could be concluded that positive attitude is needed by teachers in order to integrate ICT in language teaching for the benefit of pupils. Moreover, ICT has the potential to motivate learners to learn English with less pressure, anxiety and most of all are able to control the learning as it is also a form of help to teachers to be part of learning as teachers’ role is to be a mentor.

Study conducted by Ab.Rahim & Shamsiah (2007) showed that ICT confidence among respondents differed significantly. Those of them who have teaching experience found to be more confident than those without experience. This is because those with experience is able to decide when and where to integrate ICT in the teaching and learning process. The male respondents were more likely to have more confidence than the females in the incorporation of ICT. The male respondents tend to be more comfortable with the integration ICT in teaching as it seems to ease their task.

3. Conceptual Research Framework
The model that has been adapted in my research is the Technology Acceptance Model (Davis, 1989). This model basically points out the external variable that influences the subject to use the tool. These external variables influence the perceived usefulness and the ease of use in using ICT. The attitudes of individuals too determine the use of ICT. What is the intention or behaviour that an individual possess too determine the actual system in use. The Technology Acceptance Model (TAM) is an information systems theory that models how users come to accept and use a technology. The model suggests that when users are presented with a new software package, a number of factors influence their decision about how and when they will use it, notably: Perceived usefulness (PU) - This was defined by Fred Davis as "the degree to which a person believes that using a particular system would enhance his or her job performance". Perceived ease-of-use (PEOU) - Davis defined this as "the degree to which a person believes that using a particular system would be free from effort" (Davis, 1989).

![Technology Acceptance Model (Davies, 1989)](image)

This framework is used to investigate the knowledge level, attitude and use of ICT skills among teachers based on the demographic factor which is gender and teaching experience. The output of the result is to analyse whether is there a difference in their teaching and how it enhances the process of teaching and learning.

4. Methodology

4.1 Research Design

This study involved a descriptive research design which used the survey method of data collection which is a quantitative method in order to obtain the results in the research area. The questionnaire was designed in such a manner as to get hold of results pertaining the knowledge or skills acquired by the respondents. This would further help in determining what could be recommended to uphold the education system integrating ICT. Besides that, the attitudes of teachers too play a crucial role in determining the output that would be produced in the near future. The methods chosen had definitely helped to achieve the objectives stated earlier.

4.2 Location

This study was done in Port Dickson district which is situated approximately 90 km from Kuala Lumpur. This location is being selected for its suitability and relevancy of the objective of the research. The schools around this district is divided into urban and sub rural. The schools involved in this study comprise of SK, SJK(T) and SJK( C). Therefore, the data collected was of a help for both types of environment.
4.3 Population & Sample

The population of the study comprised approximately 100 primary school teachers who teach English in the district of Port Dickson. The population of the study is quite big. Therefore the random stratified sampling is used to select respondents from the total population. Babbie (1995) stated that “stratification is the process of grouping the members of a population into relatively homogenous strata before sampling. Stratified sampling decreases the error than simple random sampling and systematic sampling. Simple random sampling and systematic sampling both ensure a degree of representativeness and permit an estimate of the error present. Stratified sampling is a method for obtaining a greater degree of representativeness – decreasing the probable sampling error”. Since the ESL teachers form about 100 of them.

4.4 Instrument

The research was done by distributing the adapted version of Charoula Angeli (2008), Department of Education, University of Cyprus. The questionnaire was divided into five parts. The details of every part were reported below.

Part 1: Demographic Information

In the first part, gender, types of school, teaching experience and education level of the respondents were studied. These questions were looked at in order to ascertain the socio-demographic level of the respondents in the research.

Part 2: Knowledge on ICT

In the second part, the respondents were asked to rate their knowledge on ICT skills such as word process, e-mailing, internet, excel and power point. Respondents were required to tick either on excellent, good, fair or no capability.

Part 3: Attitude towards ICT

In this part, the respondents were asked to respond towards their attitude upon ICT. The scales were ranked from disagree, neutral, agree and completely agree.

Part 4: Use of ICT

In this part, respondents were required to respond to how frequent do they use ICT in their teaching which were often, seldom and never.

Part 5: Obstacles and Challenges using ICT

In this part, obstacles and challenges faced by respondents were rated as often, sometimes or seldom. For the Likert items, x -scale construction were carried out by applying principal component analyses and by calculating Cronbach scores. The items that reduced the score were excluded from the scales. The mean scores were calculated too. A pilot study was done using 10 samples consisting primary school ESL teachers to validate the questionnaire.
4.5 Data Collection

After identifying the respondents, the questionnaires were sent to the respective schools immediately. A covering letter requested every respondent to kindly answer all the items together with the permission from the District Education Department of Port Dickson was attached. A self-addressed envelope with paid postage was also attached in order to facilitate the process of obtaining the questionnaires back. The time given to answer the questionnaire was 2 weeks. The identified schools were given the questionnaire and the head of English panels were responsible to collect the questionnaire forms and return them back. The data obtained were collected from the respondents themselves and the relevancy of data were reliable as the researcher herself engaged in the collection of data.

4.6 Data Analysis

The data was analyzed using the SPSS program which is “Statistical Package for the Social Science” to obtain research statistic. Descriptive test was used to explain about the respondents’ background, the knowledge level of the respondents in using ICT, attitude towards the use of ICT, use of ICT among respondents and challenges or obstacles faced by them. The proposed test was helpful to answer the research questions which had been discussed earlier.

5. Finding & Discussion

5.1 Demographic Background

Most of the respondents in this survey group were females who represent 80% of the sample and 20% of the respondents were males. This representation clearly reflects that the majority of the teachers in the teaching profession in Malaysia were non-other than women. As for the teaching experience, 46% have been teaching for less than 10 years and 54% have been teaching more than 10 years. 10% of the respondents have been using computer for less than 2 years. The majority of the respondents have been using the computer for more than 2 years comprises of 90%. The majority of the respondents i.e. 60% have received formal training and 40 % of them did not receive any formal training for computers.
Table 1: Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>%</th>
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<tbody>
<tr>
<td>Male</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Female</td>
<td>40</td>
<td>80</td>
</tr>
</tbody>
</table>

Table 2: Teaching Experience

<table>
<thead>
<tr>
<th>Teaching Experience</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 10 years</td>
<td>23</td>
<td>46</td>
</tr>
<tr>
<td>More than 10 years</td>
<td>27</td>
<td>54</td>
</tr>
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Table 3: Using Computer

<table>
<thead>
<tr>
<th>Using Computer</th>
<th>N</th>
<th>%</th>
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<tbody>
<tr>
<td>Less than 2 years</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>More than 2 years</td>
<td>45</td>
<td>90</td>
</tr>
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</table>

Table 4: Formal Training Received

<table>
<thead>
<tr>
<th>Any formal training received?</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>30</td>
<td>60</td>
</tr>
<tr>
<td>No</td>
<td>20</td>
<td>40</td>
</tr>
</tbody>
</table>

5.2 Knowledge Level Possessed By ESL teachers In Using ICT

Research Question 1: What is the knowledge level possessed by ESL teachers in using ICT? The respondents responses are rated from excellent, good, fair and no capability. The results on knowledge level possessed by ESL teachers in using ICT are shown in Table 5. 73.3% of the respondents possess good knowledge on word processing as it is the one of the most important and common application used by respondents in their teaching and learning process. Only 6.7% respondents rate themselves as excellent in using MS Word application. As for MS Excel 70% of the respondents have good knowledge on the application. Only 6.7% regard themselves have no capability using MS Excel. Majority of the respondents have good knowledge on PowerPoint application which comprises of 80% as they are often required to do presentation during their studies and also attending courses. 3.3% of the respondents have acquired excellent knowledge on e-mailing and 76.7% of the respondents have good knowledge on the application of e-mailing. As for knowledge on internet browsing only 76.7% of the respondents have fair knowledge on it.
Table 5: Knowledge level possessed by ESL teachers in using ICT

<table>
<thead>
<tr>
<th>Statement</th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>No capability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word Processing (Ms Word)</td>
<td>6.7%</td>
<td>73.3%</td>
<td>20.0%</td>
<td></td>
</tr>
<tr>
<td>Spread sheet (Excel)</td>
<td>70.0%</td>
<td>23.3%</td>
<td>6.7%</td>
<td></td>
</tr>
<tr>
<td>Power point</td>
<td>80.0%</td>
<td>20.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-mailing</td>
<td>3.3%</td>
<td>76.7%</td>
<td>16.7%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Internet browsing</td>
<td>2.17%</td>
<td>3.3%</td>
<td>76.7%</td>
<td></td>
</tr>
</tbody>
</table>

5.3 Attitudes Among ESL Teachers Towards The Use Of ICT

Research Question 2: What are the attitudes among ESL teachers’ towards the use of ICT? Each item was rated from disagree, neutral, agree and completely agree. Table 6 presents the results among the respondents’ attitudes towards ICT. The respondents’ attitudes towards ICT are positive. Most of the items are agreed by the respondents concerning the attitude towards ICT. 60% of the respondents agree that they feel comfortable using ICT as a tool in teaching and learning. Majority of the respondents agree that the use of computer stresses them out. A large number of respondents i.e. 70% stated that they do not know how to fix it if something goes wrong. Only a handful of them agree (20%) and completely agree (10%) that they know how to fix it if something goes wrong. 55% of them are neutral to the statement that the use of ICT in teaching and learning excites them. 70% of the respondents agree and 30% of the respondents completely agree that the computer is a valuable tool for teachers. The majority of the respondents completely agree that the computer will change the way students learn in classes. 65% of the respondents disagree that the ICT is not conducive to student learning because it is not easy to use. The statement computer helps students understand concepts in a more effective way is agreed by 75% of the respondents and completely agree by 25% respondents respectively. The majority of the respondents i.e. 80% agree that computer helps teachers to teach in more effective ways and 20% of them completely agree to the statement. More than half which is 60% of the respondents agree that computer is not conducive to good teaching because it creates technical problems but 40% of the respondents disagree with the statement.

Table 6: Attitudes Towards ICT

<table>
<thead>
<tr>
<th>Items</th>
<th>DA%</th>
<th>N%</th>
<th>A%</th>
<th>CA%</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel comfortable using ICT as a tool in teaching and learning.</td>
<td>40</td>
<td>60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The use of computer stresses me out.</td>
<td>10</td>
<td>40</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>If something goes wrong I will not know how to fix it.</td>
<td>70</td>
<td>20</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>The use of ICT in teaching and learning excites me.</td>
<td>10</td>
<td>55</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>The computer is a valuable tool for teachers.</td>
<td>30</td>
<td>70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The computer will change the way students learn in my classes.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The ICT is not conducive to student learning because it is not easy to use.</td>
<td>65</td>
<td>25</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>The computer helps students understand concepts in more effective ways.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The computer helps teachers to teach in more effective ways.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The computer is not conducive to good teaching because it creates technical problems.</td>
<td>40</td>
<td>60</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Scale: DA-Disagree    N-Neutral    A-Agree     CA-Completely Agree
5.4 Level Of ICT Use For Educational Purposes

Research Question 3: What is the level of ICT use for educational purposes by teachers? For the purpose of answering this question the respondents were asked to respond to 9 Likert-scale items measuring their level of ICT use for educational purposes. Table 7 shows the result of ICT used for educational purposes by teachers. 70% of the respondents responded that they seldom use it for teaching and learning specific subjects. This reflects that majority of the respondents seldom use it. Majority of them i.e. 87% of the respondents often use it to teach computer skills. As for finding and accessing information and educational materials 60% of the respondents often use it and 40% of the seldom use ICT. 70% of the respondents who do presentations often use ICT and only 16% of the respondents often use ICT for preparing lesson. 73% of the respondents seldom use ICT to communicate with students but 67% of the respondents communicate with other teachers using ICT. As for monitoring and evaluating students’ progress or keeping track of students performance 67% of the respondents often use ICT and as for report preparing 80% of them use it often too. It can be concluded that the results portrait that the respondents often use ICT for majority purposes.

Table 7: Level of ICT used for educational purposes by teachers.

<table>
<thead>
<tr>
<th>Items</th>
<th>Often %</th>
<th>Seldom %</th>
<th>Never %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching –learning for specific subjects</td>
<td>25</td>
<td>70</td>
<td>5</td>
</tr>
<tr>
<td>Teaching computer skills</td>
<td>87</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Finding and accessing information and educational materials</td>
<td>60</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Making presentation</td>
<td>70</td>
<td>27</td>
<td>3</td>
</tr>
<tr>
<td>Preparing lessons</td>
<td>16</td>
<td>84</td>
<td></td>
</tr>
<tr>
<td>Communicating with students</td>
<td>24</td>
<td>73</td>
<td>3</td>
</tr>
<tr>
<td>Communicating with other teachers</td>
<td>67</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>Monitoring and evaluating students’ progress or keeping track of students performance</td>
<td>67</td>
<td>30</td>
<td>3</td>
</tr>
<tr>
<td>Preparing reports</td>
<td>80</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

5.5 Obstacles Faced By Teachers In Using ICT

Research Question 4: What are the obstacles or challenges faced by the teachers in using ICT? The respondents have answered 5 Likert-scale items to measure the obstacles faced by the respondents in using ICT. Majority of the respondents i.e. 50% of them claim that they seldom have problem in technical support. Whereas, 80% of the respondents face the obstacle when lacking time in school to fully utilise the ICT infrastructure. 70% of the respondents do agree that sometimes they have limited knowledge on how to make full use of the ICT. Majority of the respondents i.e. 60% of them seldom have limited understanding on how to integrate ICT into teaching. 80% of the respondents sometimes face challenges when there is lack of software or websites that support teaching and learning ICT.

Table 8: The obstacles or challenges faced by teachers in using ICT.

<table>
<thead>
<tr>
<th>Items</th>
<th>Often %</th>
<th>Sometimes %</th>
<th>Seldom %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of technical support</td>
<td>20</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>Lack of time in school</td>
<td>80</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Limited knowledge on how to make full use of ICT</td>
<td>20</td>
<td>70</td>
<td>10</td>
</tr>
<tr>
<td>Limited understanding on how to integrate ICT into teaching</td>
<td>10</td>
<td>30</td>
<td>60</td>
</tr>
<tr>
<td>Lack of software or websites that support teaching and learning</td>
<td>10</td>
<td>80</td>
<td>10</td>
</tr>
</tbody>
</table>

6. Discussion

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The findings of the study can be summarized under four headings, which are the level of knowledge ESL teachers possess in using ICT, the attitudes that ESL teachers possess towards ICT, the level of ICT used for educational purposes by ESL teachers and the obstacles faced by ESL teachers in using ICT.

The first shows the knowledge level possessed by ESL teachers’ in using ICT. Research question one was aimed to investigate the knowledge level of the teachers. The results reveal that the teachers’ level of knowledge on ICT is moderate as they were only good at using certain applications such as word processing, spread sheet, power point and e-mailing as these are the main applications which are commonly and often used in the teaching profession. The results seem similar to research done by Rosnaini & Mohd Arif (2010) where minority group of teachers were knowledgeable on ICT. Study by Endrogen (2011) also confirms this research as the findings of the study reflects that the respondents were highly knowledgeable only on certain applications such as word processing and internet browsing.

The second finding is related to attitudes. The findings demonstrate that teachers’ attitude are positive. This result is in compliance with research carried out by Lau & Yeoh (2008), Melor (2007) and Samuel & Zaitun (2007). These studies demonstrated that majority of the respondents have positive attitude towards using ICT in teaching ESL. The Davis Technology Acceptance Model (TAM) corresponds well with the study. The results demonstrated that 70% of the respondents believe agree that computer is a valuable tool for teachers and 70% of them completely agree that the computer will change the way students learn in classes. About 80% of the respondents are positive that computer helps students understand concepts in more effective ways and also helps teachers to teach effectively. More than 50% agree that technical problems due to computer do not hinder good teaching.

The third finding concerns about the use of ICT for educational purposes by teachers. The analyses revealed that more than half often used ICT to teach computer skills, do presentations, communicating with other teachers, monitoring and evaluating students’ progress or keeping track of students’ performance and preparing reports. This finding is parallel to studies done by Sameul & Zaitun (2007) and Endrogan (2007). These studies reveal that when respondents have positive attitude towards ICT hence the level of ICT use is high too as the respondents are motivated to use ICT for educational purposes. The Technology Acceptance Model (TAM) suggested that the respondents’ attitude towards ICT will determine the actual system in use. The model is suitable for this study as it had defined well.

The last finding of the research is on the obstacles faced by the teachers in using ICT. Majority of the respondents often lack of time in school to use ICT as they are burdened with other responsibilities. Only a minority are faced with technical support and knowledge on how to make full use of ICT. This finding is not in line with study by Pramela & Noraza (2007) as the research reported that the ESL teachers are faced with challenges in using ICT in the teaching and learning routine and getting themselves adapted to the new learning environment.

7. Conclusion and Recommendation

The findings of the study have implications on educators and policy makers. It is high time for educators to be able to use the computer effectively. Educators have to well equip themselves in order to be on par with students. The findings reveal that teachers still have difficulty in using certain applications such as MS Excel. It is no longer for teachers to give excuses as technology is evolving rapidly. It is time for all to gear up and learn the required skills. Positive attitude motivates individuals use ICT effectively and further upgrade the needed skills.

As for policy makers, policies which had been formulated should be appropriate and
responsive to the needs of knowledge society in the information age. A special team or program has to be set up for continuous exchange of ideas on ICT skills which would be helpful to teachers. No doubt lab assistants are catered in most schools and technical problems are easily solved. However, teachers do need a platform to share and discuss problems relating to ICT pedagogy.

This study focused on ESL teachers’ knowledge, attitude and use of ICT. Future studies should be done in terms of students’ perception on teachers towards knowledge, attitude and use of ICT. This will enable the policy makers to make improvement in the current education system as well as look into teachers’ needs. This study is limited to survey thus future study done should include interview or observation to further enhance the findings.

REFERENCES


