

The Effectiveness of Using Internet as a Principal Information Resource in Teaching and Learning Activity in Higher Educational Institutions in Malaysia.

Farahiza Zaihan Azizan

Jabatan Teknologi Maklumat, Kulliyah Muamalat
Kolej Universiti INSANIAH
Jalan Sultanah Sambungan, 05350 Alor Star, Kedah
Tel: 0194254740/047374372 Fax: 047374371
E-mail: farahiza_zaihan@yahoo.com

ABSTRACT

Globalization has brought the major changes to the growth of technology. The use of Information and communication technology (ICT) has left a tremendous impact on human life. The rapid growth of this technology brings a new dimension to the education field. This exploratory study examined the effectiveness of using internet as a principal information resource in teaching and learning activity in higher educational institutions in Malaysia. The library researches done by the researcher have shown that majority of the previous researchers indicated that there are significant relations between the internet and the student and also the lecturer in using internet as a principal information resource in teaching and learning activities. The high use of internet for the quest for information also supported by their favorable attitudes towards ICT. The findings showed that internet is a technology that is considered to bring benefits to the student and lecturer in teaching and learning activities as well as the applications provided by the internet.

Keyword: *Information and communication technology (ICT), internet, teaching and learning, principal information resources.*

1.0 INTRODUCTION

Internet is one of the ICT applications that is widely used all over the world. Internet is such a huge world full of interesting things. People can use internet to find or learn about information, to listen to music, to watch a movie and to communicate with friends. Internet is a very popular application with maximum access at a low cost. Furthermore, nowadays, internet has been used as a platform to the portal and web that can be used by the student and the lecturer to search for information and to make a discovery. People at every level of age tend to use an internet for information. They can get access to the information within a second. All these factors mentioned above make an internet an interesting technology to discover as well as to apply in lives. Therefore, the student and also the lecturer especially in higher educational

institutions choose to use an internet as an information resource in their teaching and learning activities. Internet provides them with an information valley that they can find and learn about information from the virtual library, subscribe the article and journal from the electronic journal (e-journal), communicate with friends and other people from different cities and towns using the forum application or download and upload the tutorial from and into the portal or web. Thus, this study is primarily aimed to examine the effectiveness of using the internet as a principal information resource among the students and lecturers in the higher educational institutions and also to discover the benefits of using internet in teaching and learning activities. Specifically, this study focuses on four main objectives which are listed below:

- To study the relationship between lecturers' usage of internet and the teaching and learning activity.
- To study the relationship between students' usage of internet and the teaching and learning activity.
- To study the role of internet in teaching and learning processes.
- To survey the influence of the internet in education

2.0 BACKGROUND

The growth of science and technology provided the student and lecturer in higher educational institutions with various convenient facilities in order to support their teaching and learning processes. The convenience facility is provided for their comfort and to make their teaching and learning processes more interesting and focused. The use of ICT application such as internet helped them to teach and learn fast at a low cost. The search for information becomes easier and faster at anytime, and anywhere. The needs for information from the articles, journals, newspapers and magazines, drive them to find for the appropriate technique that can help them to complete the process of teaching and learning. Internet and the applications offered such as portal, web, homepage, virtual library and many more attracted the students and the

lecturers to choose the internet as a principal information resource in their teaching and learning activities. Thus, there are important to examine the relation between the student and lecturer with the internet. In add, we can identify the benefits of the internet offered to the user.

3.0 LITERATURE REVIEW

Internet has changed the way people work and live. It change the way we communicate and interact with other people. The usage of internet has increased from day to day. The internet is widely used in business, education, engineering, architecture and many more fields. For example, Baloh and Trkman (2003) stated that the integration between the information and the people in the organization drive the organization towards objective.

According to statistic from Roberts (2006), now internet is connecting more than 500 millions hosts all over the world compare to 100 hosts in late 1985. Internet is the fastest diffusionary Information and Communication Technology (ICT) innovation till to date. For instance, it took just ten years for the web-based Internet to reach 50% of American Homes, compared to 52 years taken by telephone. It took only three years for the Internet to reach 50 million users. By contrast, it took 38 years for television to have 50 million users. During 1999, the number of Internet users increased by one million every month (Dholakia, Dholakia and Kshetri, 2003 as cited in Md.Shah Azam, 2007). The number shown that internet has a significant influence over the individual or the organization on how, why and when they work.

The use of internet in Malaysia begun in 1990 and JARING was the first internet service provider (ISP)

launched by MIMOS (Malaysian Institute of Microelectronic System). The Malaysia government, acting with United States of America, together for a common purpose to increase the usage of the internet by using the satellite. In add, the government also launched the MSC (Multimedia Super Corridor) project in 1996 to show their support to the ICT technology. The growth of internet usage in Malaysia is driven from the factors such as low cost, wide access, faster to communicate, and powerful application as well as the convenience infrastructures provided by the government.

The use of internet has leaved a deep impact to how people do their work, the process of work and as well the throughput. The use of internet in education was first introduced by the implementation of the e-learning concepts. Nowadays, e-learning is crucial in teaching and learning. Goh, Azman and Tey (2005) stated that e-learning has become a popular medium to deliver knowledge in and out the classroom. Brandon Hall (2003) as cited in Goh, Azman and Tey (2005) defined e-learning as a process of learning using the communication tools such as internet/intranet or CD/DVD.

Malaysia also applied the e-learning in teaching and learning activities. Glenda, Mahon, Devonish, Alleyne and G.Alleyne (2006) in their study, the perception of information and communication technology among undergraduate management students in Barbados found that there are empirical studies done by the previous researchers all over the world shown that there is a significant relation between the computer, internet and the student as well as the lecturer. The empirical studies are shows in the following table:

Table 1: *The Empirical Studies by The Previous Researchers (Glenda, Mahon, Devonish, Alleyne and G.Alleyne, 2006)*

Researcher	Year	Study / Research	Study / Research Outcome
Dorup	2004	Study Among Medical Students In Denmark	The students used the computer to access to the internet and send email at home frequently and they supported the use of ICT in learning activity to replace the conventional method.
Kraut et al	1998	Study On The Level Of Age In Computer Usage.	The adults spent more their time to access the internet compared to teen age.
Ramayah dan Jantan	2003		The relationship between age and internet usage is negative. The use of internet is not influenced by the age factor. The student used internet frequently.
Cuban	2001	Study On Computer And Internet Usage Among The US University Students.	The USA university student used computer to generate document, access to the internet and communicate with friend using email. The lecturer used computer to do their research and also in their teaching activity.
Frizzler	1995	Study On Relationship Between Computer And Course Administrator	Computer has the ability to improve the teaching and learning method at a lower cost.

4.0 METHOD

This is a comparative study that focus only on document analysis from the literature.

5.0 FINDINGS AND DISCUSSIONS

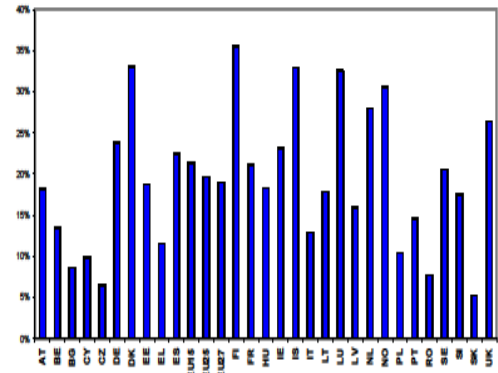
Frizzler (1995) as cited in Glenda et.al (2006) has mentioned that computer has the ability to improve the teaching and learning method. This statement is supported by the other researcher such as Kraut et.al (1998), Cuban (2001), Ramayah and Jantan (2003), Dorup (2004) and others. Their empirical research (Table 1) found that computer has been used in the teaching and learning inside and outside the classroom. In add, the literature search by the researcher has shown that there is a significant relation between student and lecturer with the internet usage as well.

Internet was used widely in the west before it expanded to the other place in the world. According to Commission of the European Communities (2008), the use of ICT in schools across Europe has increased dramatically since 2000. A Commission survey, covering teachers and head teachers separately, shows that teachers are broadly familiar with computers, using them in and out of work. Unsurprisingly, it is the younger teachers who use ICT most readily. 86% of teachers think that pupils are more motivated and attentive when computers and the internet are used in class. 80% see advantages in using ICT in school, in particular for exercises and practice.

ICT use is most widespread in higher education. Practically all universities now have websites and 9 out of 10 have intranets, so the basis for ICT use is in place. This has been reflected in a steady growth of satisfaction among students.

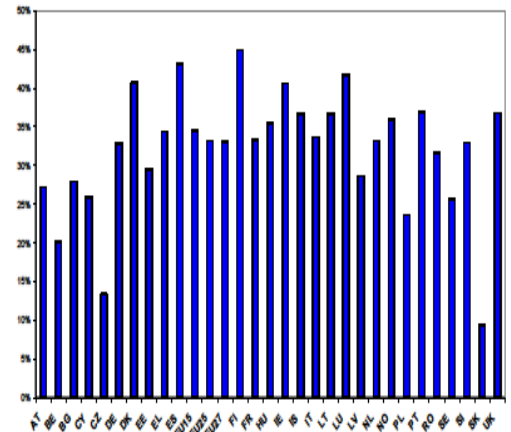
Figure 1 below shows the use of the internet for looking for information about education, training or course offers among the internet users in the Europe.

Chart 6: Internet use for looking for information about education, training or course offers (as a percentage of all individuals)



Data source: Eurostat New Cronos Database, 2007

Chart 7: Internet use for looking for information about education, training or course offers (as a percentage of online users)



Data source: Eurostat New Cronos Database, 2007

Figure 1: Internet use for education in Europe Country (Commission of the European Communities (2008))

In higher educational institutions in Malaysia, the use of computer and internet in teaching and learning activity can be shown in the Table 2:

Table 2: *The Empirical Studies by The Malaysian Researchers*

Researcher	Year	Study / Research
Goh Ying Soon, Azman Che Mat, Tey Meng Kar	2005	The Use Of Technology In Teaching Language: The Challenge, Treat And Opportunity.
Shukriah Ismail	2004	The Use Of Internet Among The Undergraduate Student Of UTM
Nasariah Mansor, Nafisah Mahmud, Faizah Ahmad	No date	IT Application In Writing Article: A Survey Of Skill And Perception Of The Student.
Norazen Md Dali, Hassan Ash'ari Zainal Abidin, Mohd Ruzman Mat Ali	No date	A Competency Of Using ICT In Teaching And Learning Among The Lecturer.
Robiah Sidin, Juriah Long, Khalid Abdullah, Puteh Mohamed	2001	The Adoption Of Science And Technology: The Impact Of Technology To The Training And Education Among The Malaysian Youth.
Surendran a/l sankaran	2006	The Use Of Internet As An Information Resource Among The UUM Lecturers.
Wahyu Idrus, Yahya Buntat	No date	The E-Learning Application In Teaching And Learning Activity In Malaysia Primary School: Issues And Implementation.
Alias Daud, Zainab A.N., Zaitun A.B.	No date	The Impact Of IT On Higher Education For Malaysia

The computer and internet is used in the classroom activity as a tool that can increase students' interest. This statement is supported by the study done by Nasariah, Nafisah and Faizah (n.d) and Surendran (2006). According to Surendran in his survey, the lecturer awareness about the importance of using the internet in teaching is high. The lecturer moderately used an internet as a search engine to find for the information.

Besides, it makes teaching and learning activities more interesting and fascinating. For example, the used of multimedia elements, audio, video, image, text, animation and many more in order to prepare for the lecture notes, make the teaching session full of focuses and attractions. The survey also found that there is also a significant relation between the skill of using internet and the purpose of using the internet.

Internets' usage is influence by the student and lecturer computer skills and literacy. The computer literacy proved to help them to use the internet in effective and efficient manners. According to Dorup (2004) as cited in Glenda et al., (2006), he said that most of students have developed

their computer skills from home. They had used the computer at home and they also have access to the internet. Their skills increased when they frequently used the computer and the internet. Thus, the access to the internet helped them to get focuses and also supported them with multi-kinds of information and sources.

Students frequently use internet to find for information. Internet provides them a virtual library all over the world at a lower cost, and 24hours a week. Shukriah (2004) in her empirical study found that the contents of internet are suitable to use as a source in their teaching and learning process. The internet is an ICT technology that provides great benefits to the student and lecturer in order to improve their teaching and learning processes.

Robiah et. al (2001), has conducted a survey to discover the adoption of science and technology among the Malaysian youth. The survey found that Malaysian youth have accepted and adopted science and technology in their daily basis and have positive attitudes towards the technology.

Information and communication technology (ICT) for learning is not only improving learning but has the potential to transform the learning and teaching processes and offer as such other and novel ways of education and training next and together with more traditional schooling. The impact of ICT use on learners is closely related to its potential to innovate the teaching and learning approaches. Alias et.al (n.d) said that it is need to transform the conventional method of teaching and learning to ICT. The e-learning application provides by the internet change the way of the classroom.

Goh, Azman and Tey (2005) mentioned that technology has a great impact to the education. Besides, they have identified e-learning as an effective method that can be used in the teaching and learning activity. Rhiza (2008), stated that the use of e-learning has transformed the conventional method of teaching and learning into a new dimension. Rhiza statement is supported by Wahyu and Yahya (n.d) that identified e-learning is an appropriate technique to be used in presenting the teaching modul.

6.0 CONCLUSION

This study found that students and lecturers were generally favourable to ICT in an academic setting. Students had access to computers and the Internet off campus. There also seems to be widespread usage of various forms of information technology such as Internet, Web and email.

university and higher educational institutions should maintained the high levels of ICT usage among students through continuous education and promotion of the benefits attached to ICT resources such as internet. The university and the institution need to encourage lecturers and course administrators to embrace e-learning and its resources in their teaching and learning activities.

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