

## **THE USE OF SEARCH ENGINES THROUGH ICT AMONG STUDENTS OF INSTITUT PERGURUAN PEREMPUAN MELAYU MELAKA**

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'Information Source Management' is one of the major subjects that is compulsory for the KPLI (Kursus Perguruan Lepasn Ijazah) students who took the Educational Technology course. This research is done on the KPLI students (January 2008 intake) who are undergoing the teaching course in Institut Perguruan Perempuan Melayu Melaka. All the eight study units are taken as samples, which consists of 100% female students. This research does not intend to provoke gender discrimination, but its purpose is to study the trend of computer use, search engines and websites used as well as their purposes among the female students solely.

### **Statement of Problem**

Knowledge of the use of web browsers among teacher trainees is important because it will help to identify any shortcomings in their ICT skills. The purpose of this research is to identify the skills of using the computer and website browsing as well as their purposes in the subject of Information Source Management among the female students in Institut Perguruan Perempuan Melayu Melaka.

### **Objectives**

The objectives of this research are to:

1. Detect the skills of using the computer and software in the Information Source Management course
2. Identify the types of search engines that are normally used to obtain information sources and its frequencies
3. Detect the search engines that are most frequently used in the Information Source Management subject
4. Detect the use of search engines in the Information Source Management subject.
5. Determine the efficiency level of the search engine use in the Information Source Management subject.
6. Identify the use of websites and their purposes.
7. Identify the advantages, problems and suggestions for use of search engines in the Information Source Management subject.

### **Research Questions**

The study was done to answer the following research questions:

1. How far are the students able to use the computer and software for the Information Source Management subject?
2. What are the types of search engines frequently used to obtain information sources?



3. What are the most frequently searched information in the Information Source Management subject?
4. How far had the search engines been used in the Information Source Management subject?
5. How far had the search engines been efficiently used in the Information Source Management subject?
6. What are the types of websites used and their purposes?
7. What are the advantage of search engines and their problems and how do we overcome the problems?

### Methodology

This research employed the survey method. The research samples are randomly chosen based on the study units who took the 'Information Source Management' course ( $n = 293$  or 75 percent of the population). The data were collected using the questionnaire instrument and analyzed descriptively by using percentage and mean.

### Findings

The findings indicated that 89.1% (261) of IPPM students are between 21-30 years old; this is more than those aged between 31-40 years, which is 10.2% (30); those students aged under 20 formed only 0.7% (2) of the sample.

The research findings stated that 62.5% (183) of the IPPM students are still single, 35.2% (103) are married and the other 2.3% (7) are of unknown status.

The research found that 97.3% (285) of IPPM female students owned computers, while the other 2.7% (8) did not. From the aspect of computer skills, the research findings indicated that 95.2% (279) students are skilled in using computers and the other 4.8% (14) are unskilled. The research findings also showed that 95.9% (281) students are skilled in using the Internet while the other 4.1% are not.

Meanwhile, the most frequently used search engines to obtain information sources in the Information Source Management subject by IPPM students is Google with 52.2% (153), followed by Yahoo with 45.2% (133), MSN with 1.2% (4), YouTube with 1.1% (2) and the most unpopular is Alta Vista with 0.3% (1).

Findings of the research also indicated that 88.7% (260) of IPPM students search for their 'learning material sources' as the most frequently searched information obtained through the search engines for the Information Source Management subject. Meanwhile, the aspect of entertainment is 3.1% (13), followed by hobby with 4.6% (9), sports with 2.4% (7) and games with 1.2% (4).

The research also found out that the frequency of IPPM students who use the search engines 3-5 times a week is 33.4% (98), numerous times in a day with 31.3% (92), 1-2 times a week with 17.7% (52), once a day with 12.6% (37) and once in a week or less with 4.8% (14).

From the aspect of search engines as the source in the Information Source Management subject, the research found that 75.4% (221), IPPM students stated that search engines are definitely one of the sources to obtain information (with a mean of 4.2). From the aspect of information obtained through search engines, 97.6% (286) (with a mean of 4.4), IPPM students stated that they assisted in the Information Source Management subject.

Some 94.5% (25) of IPPM students also stated (with the mean of 4.4) that the information obtained by using search engines is relevant to the Information Source Management subject. They also affirmed (91.9% or 269), with the mean of 4.3, that the search engines are appropriate as the means of obtaining information for the Information Source Management subject.

The research findings also implied that IPPM students also browsed through other websites for the purpose of teaching and learning. The most popular websites are Friendster and Yahoo with each respectively with 20.1% (59), followed by Google with 8.2% (24), Utusan with 6.8% (20), YouTube with 6.1% (18), The Ministry of Education with 5.5% (16), Karya and Mozilla with 1.4% (4) each, and PTPTN with 0.3% (1). However, there are also IPPM students



who did not browse through the other websites for teaching and learning purposes, which are 14% (41) of the sample, and those who did not specify the actual websites browsed, constituting 14% (41).

Another research findings revealed that the IPPM students also browsed through other websites for purposes other than searching for teaching and learning materials, in which those who check their e-mail comprised 15.7% (46), obtain current information with 14.3% (42), increase their knowledge about the courses taken with 13.3% (39), track current developments with 11.3% (33), contact friends with 9.9% (29), exchange information with 5.8% (17), search for favorite songs with 4.8% (17), fill in free time with 4.4% (13), release tension with 4.1% (12), pay debts with 1.7% (5), add pictures/clipart collection with 1% (1), read blogs 0.7% (2) and look for AirAsia ticket price with 0.3% (1). However, some students did not respond to the question, and these formed 12.6% (37) of the sample.

On the advantage of search engines, the research noted that 55.3% (152) of IPPM students stated that the benefits of search engines are that they facilitate information searching; 11.3% (33) stated that it helped them in completing their course work and facilitated them in finding the right information, 2% (6) stated that it is easy to search for animation pictures and 0.3% (1) stated that it can provide ideas for the users. However, 12.9% (38) of IPPM students did not respond to this item.

From the research findings, the problems faced IPPM students while browsing the websites are due to the slow server (39.9% or 112 students), frequent server outage (13.7% or 40), inaccurate information (13% or 38), limited network in IPPM (7.5% or 26), unclear signal with 6.8% (22), no Internet connections in lecture rooms with 5.9% (17), and unavailable wireless service in IPPM with 1% (3). Some 12.2% (37) of the IPPM students did not respond to this item.

Through the research findings, IPPM students did suggest some steps to make information more easily available. Some 22.9% (67) suggested the IPPM management install more wireless hotspots and increase the Internet network to all the lecture rooms and buildings in IPPM; 18.8% (55) suggested that the server and network quality be enhanced; 10.2% (30) suggested more Internet coverage; 8.5% (25) suggested more Web logins; 2.4% (7) suggested that all IPPM students have their own Internet account at home, 2% (6) suggested that the lecturers give completed sample projects; and 0.7% (2) suggested that all the Internet systems in IPPM be free from viruses. Some 27.7% (81) of the students did not give any suggestion (did not respond to this item).