

**DEVELOPING LIFE LONG LEARNERS THROUGH INFORMATION LITERACY PROGRAMMES: CASE STUDY OF HOSPITAL UNIVERSITI KEBANGSAAN (HUKM) LIBRARY**

**Maimunah Kadir<sup>1</sup> and Mohd Sharif Mohd Saad<sup>2</sup>**

<sup>1</sup>Library Hospital Universiti Kebangsaan Malaysia  
Jalan Yaakob Latif, Bandar Tun Razak  
56000 Cheras, Kuala Lumpur, Malaysia.

<sup>2</sup>Faculty of Information Management, Universiti Teknologi MARA  
40450 Shah Alam, Selangor, Malaysia

<sup>1</sup>mai@mail.hukm.ukm.my; <sup>2</sup>mohdshar@salam.uitm.edu.my

**ABSTRACT**

*Libraries today acknowledge the importance of life long learning among their users, in their work and in their everyday life. Many believe it can be achieved through information literacy skills. Information literate are those who have learnt how to learn and are prepared for life long learning. They can always find the information needed for any task or decision-making. Recognizing these needs, many libraries of institutions of higher learning including Hospital Universiti Kebangsaan (HUKM) Library, implement programmes to develop information competencies of their users.*

**Keywords:** Information literacy, Information competencies, Life long learning

**INTRODUCTION**

Life long learning is defined as the gaining of knowledge through one's life span, from a variety of sources and learning opportunities. The widespread of social and economic changes has resulted in the need to engage in learning at every stage of our life. These changes require both individuals and organizations to acquire multiplicity of skills and knowledge. Kotter (1995) of Harvard University has identified rules for success in work life. The last rule states "Never stop trying to grow; lifelong learning is increasingly necessary for success, this means continuous learning." Life long learning or continuous learning is essential for survival in our changing world. Librarians and libraries have an important role in this life long process. It can act as an access point to the learning opportunities; it can offer opportunities for individuals or groups to engage in continuous learning through its resources and services.

*Maimunah, K. & Mohd. Sharif M.S.*

## **INFORMATION LITERACY**

Among the pioneer descriptions of information literate person was put forward by Zurkowski (1974), in his capacity as the President of the Information Industry, U.S.A. He associated information literacy with the effective use of information within a working environment and specifically with problem solving. He described information literate as "People trained in the application of information resources to their work. They have learned techniques and skills for utilizing the wide range of information tools into solutions for their problem". Over a period of 25 years, various definitions, concepts and descriptions of information literacy have been put forward. As mentioned by Ford (1999) the term has rapidly changed its meaning in response to educational reforms and international concerns. The link between information literacy and learning has always been consistent. The American Library Association Presidential Committee on Information Literacy asserts that Information Literacy is a necessity set of abilities for our daily life. A person who is information literate must have the ability to "recognize when information is needed and have the ability to locate, evaluate and use effectively the needed information" (ALA, 2000). An information literate student would have mastered the ability to locate, organise, evaluate and communicate information.

Today, information technology has certainly made accessing and delivery of information much easier and faster. Many have confused Information Literacy as part of IT literacy. As according to Tuckett (1989) "While you can be computer literate without being information literate, you cannot possibly be information literate, without also being computer literate." One must acknowledge information literacy as an intellectual framework for recognizing the need for understanding, finding, evaluating and using information, which may be supported in part by fluency with IT, in part good investigative method, but most importantly, through critical discernment and reasoning. Information Literacy initiatives sustain and extend "life long learning through abilities that may use technologies but are ultimately independent of them" (Council of Australian University Librarians, 2001).

## **INFORMATION LITERACY AND HIGHER EDUCATION IN MALAYSIA**

Traditionally, academic libraries have always emphasised on the training of its patrons on information seeking and use. Terms such as bibliographic instruction, library orientation and user education are used to describe their

### *Developing Life Long Learners Through Information Literacy Programmes*

training programme on information searching and retrieval. With democratization of education, higher institutions of learning, both public and private, received a considerable growth in the number of students, full time, part time and distance learners. Innovations of the computing and telecommunication technologies also have transformed most of these libraries into 'hybrid libraries'. The growth of digitized information, access to the Internet and the World Wide Web had led to changes on the emphasis and focus of libraries and its services. Information Literacy programmes can serve as an important contribution of the libraries not only within their own institution but also towards building an informed society.

Overall Malaysian academic libraries conduct four types of information skills or literacy programmes for their undergraduates (Mohd Sharif and A.N. Zainab, 2002). They are:

- a. Orientation programme which is compulsory for all new undergraduates
- b. Information skills programme for their final year undergraduates which is optional
- c. Specialised information skills programme such as use of databases, Internet, and searching skills
- d. Information literacy / skills courses which earn credits and compulsory or are offered as elective

### **HOSPITAL UNIVERSITI KEBANGSAAN MALAYSIA (HUKM) LIBRARY**

HUKM library started its services in July 1997 to support the teaching, learning and research activities of the Medical Faculty and the Hospital. Medical education is a life long process beginning with medical school, extending into houseman ship and continuing through years of medical practice. Support of life long learning, with knowledge of information skills, require more than computer knowledge. Other requirements include awareness of the broad range of medical information resources available and their relative value for a particular need, the know-how to use them and the motivation to use them on a routine basis. It is the library's belief that in order to provide a foundation for life long learning, medical graduates should be able to have the following attributes:

- a) Demonstrate the knowledge of information resources and tools available to support life long learning. Information sources among them include MEDLINE

*Maimunah, K. & Mohd. Sharif M.S.*

and other relevant bibliographic databases, textbooks, reference sources and Internet resources.

- b) Demonstrate the ability to retrieve information through the following:
  - i) Perform database searches by using Boolean operators that would reflect understanding of medical language, terminology and the relationship between medical terms and concepts and to refine search strategies if necessary.
  - ii) Able to download citations from a search and organise them into a personal database.
  
- c) Evaluate and filter information in terms of:
  - i) Accuracy and validity of information in general
  - ii) Ability to differentiate the different types of information sources in terms of their currency (for example a review vs. an original article, authority, relevance and availability)
  - iii) Ability to weigh conflicting information from several sources and reconcile the differences, and
  - iv) Understanding of copyrights especially with regard to materials that are retrieved electronically.
  
- d) Possess good “information habits” which include:
  - i) Making decisions based on evidence rather than opinion
  - ii) Using multiple information sources for problem solving, and
  - iii) Safeguarding confidentiality of private information obtained from patients.

### **Historical background**

Perpustakaan Tun Seri Lanang, the main library of Universiti Kebangsaan Malaysia (UKM) submitted a proposal to the Senate in 1998 to offer the Information Skills Course for first year undergraduate students. It was approved by the Senate as an elective programme and was conducted with the Co-curriculum Centre as the coordinator. It is a 2-credit hour course and a maximum of 150 students were accepted for the pioneer programme. When the course conducted at the main campus in Bangi proved to be a success, a similar module was introduced for the first year medical students in the year 2000. A maximum intake of 50 students was imposed because of the ratio of students to the computers available in the library.

The first part of the module (HA1011) was taught in the first semester. Topics that include introduction to libraries, development of library collection,

### *Developing Life Long Learners Through Information Literacy Programmes*

cataloguing and classification and organization of materials were taught in the first semester. For each semester a number of eight hours lectures and 16 hours of tutorial were required to ensure that the programme met the requirements of the Academic Affairs Department of the University. Every hour of lecture was followed by two hours of tutorial. At the end of the semester the students visited either a public library or a special library or the National Library of Malaysia. Students were required to submit a report of their visit. Assessment was based on 10% for attendance, 60% for tutorial assignment and 30% for final examination.

Subjects taught in the second semester (HA1021) included topics such as indexing, introduction to databases, and introduction to virtual library, construction of online databases and creation of homepages. The highlight of the second semester was in the form of a Co-curriculum Day when events such as Treasure Hunt, Info Hunt, Quiz, and Win, Lose & Draw were held for all students.

#### **Survey on the Information Skills Course**

A survey was undertaken to understand the information skills available among the medical students and to compare these skills among those who have taken information skills course. This survey also aimed at understanding the sources of information used by the respondents, usage of the Internet, their search strategies and the criteria applied in the evaluation of information. These are pertinent skills for any student and are among the skills being imparted through the information skills course. About 150 questionnaires were distributed to each group of students. For purposes of analysis, students who offered information skills as co-curriculum course were referred to as *koku* and students who did not attend information skills course were referred to as *non-koku*. The respondents were currently in the 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> year of study. Only 76 questionnaires were returned. It was difficult to get everybody to participate in the survey since at that particular time the students were having their first semester examination. From the total of 76 respondents, 42 respondents (28%) were students who offered the information skills course (*koku*), while 34 respondents (16%) were students who did not offer the information skills course (*non-koku*).

#### **Usage of Information Sources**

The percentage of *koku* respondents utilizing the information sources was much higher. For some sources the differences were minimal but sources such as newspapers, digital libraries and full text databases the differences were quite high. This finding is important to the Library since a substantial amount of the

*Maimunah, K. & Mohd. Sharif M.S.*

Library's budget had been spent on developing the digital library and databases. It was interesting to note that more *non-koku* respondents (61.8%) used the OPAC compared to *koku* respondents (59.9%).

Table 1: Information Sources Utilised

Information sources used by respondents when doing projects/assignments		<i>Koku</i>	<i>Non-Koku</i>
		Yes %	Yes%
1.	Internet	97.6	97.1
2.	Textbooks	92.9	97.1
3.	Books	90.5	85.3
4.	Discussion with lecturers	76.2	70.6
5.	Journal Articles	64.3	38.2
6.	Newspapers	61.9	32.4
7.	Encyclopedia	40.5	38.2
8.	Library's OPAC	59.5	61.8
9.	Other Libraries	52.4	47.1
10.	Thesis	38.1	38.2
11.	Digital Libraries	35.7	17.6
12.	Full Text databases	33.4	29.4
13.	CD-ROM Databases	14.3	17.6

#### Use of Internet

Table 2 shows only 21.4% of *koku* respondents and 14.7% of *non-koku* respondents have learned using the internet from the Library. Most of them claimed that they have learned from their friends or have learned on their own. The usage of Internet seems very positive from Table 3. The *ko-ku* students were taught topics such as introduction to virtual libraries, information retrieval using electronic databases via HUKM's library Portal

Table 2: Learning the Internet

Learning the Internet		<i>Koku</i>	<i>Non-Koku</i>
		Yes %	Yes %
1.	Friends	85.7	97.1
2.	Self-taught	83.3	91.2
3.	User Education Class	21.4	14.7
4.	One of the subjects offered in the faculty	14.3	5.9

*Developing Life Long Learners Through Information Literacy Programmes*

Table 3: Use of Internet

Use of Internet		<i>Koku</i>	<i>Non-Koku</i>
		Yes %	Yes %
1.	To get information for your studies	100	97.1
2.	Email	88.1	44.1
3.	Download Files	85.7	91.2
4.	Chatting	57.1	32.4
5.	Computer games	26.2	32.4

**Search strategies**

The *Koku* students were taught information retrieval through the Internet and search strategies using the OPAC and electronic databases. Although the difference was not high (Table 4), there were more *Koku* respondents using the difficult types of search strategies. In relation to this, the respondents were asked what they would do if their first search strategy failed. Apart from checking the spelling, higher percentage of *koku* respondents answered they would try other keywords, change search strategy or try a more specific keyword. Only 28.6% would approach the librarian (Table 5).

Table 4: Search Strategies

Search Strategies		<i>Koku</i>	<i>Non-Koku</i>
		Yes %	Yes %
1.	Keyword searches	85.7	79
2.	Subject	76.2	70.6
3.	Boolean	9.5	5.9

Table 5: Revising Search Strategies

Revising search strategy		<i>Koku</i>	<i>Non-Koku</i>
		Yes %	Yes %
1.	Check spelling of keyword	88.1	73.5
2.	Try other keywords	83.3	64.7
3.	Change search strategy	80.9	61.8
4.	Try more specific keywords	78.6	61.8
5.	Ask a friend	52.4	50
6.	Ask a librarian	28.6	17.6

### Evaluation of information and library education programme

In evaluating the information, the *koku* respondents listed comparing the information with other resources as the most important (78.6%) while the *non-koku* respondents rated discussion with lecturers as their main method in the evaluation of information (79.4%). Responding to the question as to whether the library's education programme conducted by their library has helped them in their studies, 78.6% of *koku* respondents agreed that the library education programme has helped them in their studies. They further explained that the programme has helped them in searching for more information (9), has increase their knowledge of the Internet (7), has helped them to complete their assignments (2) and has increased their understanding of Library's facilities (2). In answering the question whether they would still need the information skills after they have graduated, 88.1% of *koku* respondents and 88.2% of *non-koku* respondents answered "yes." It is also interesting to note that the *koku* respondents rated as most important that the skills were needed for life long learning (15).

Table 6: Evaluation Criteria

Criteria for Evaluation of Information		<i>Koku</i>	<i>Non-Koku</i>
		Yes %	Yes %
1.	Compare with other resources	78.6	52.9
2.	Discussion with friends	71.4	58.8
3.	Discussion with lecturers	69.05	79.4
4.	Credibility of Publishers	59.5	47.1
5.	Credibility of Authors	50	47.1
6.	Contact Experts	7.1	8.8

### CONCLUSION

Students who have offered information skills course continue coming to the Library because they realise that the information skills that they have acquired has helped them in utilizing the Library effectively. From personal interviews conducted, they have also indicated that information skill courses should be offered to students during their first year in university. We suggest that evaluation and assessment should be carried out by all libraries that have been implementing information skills/literacy programmes since continuous evaluation could improve the programmes. Academic libraries should propose to their university senate for information skills/information literacy is made a

### *Developing Life Long Learners Through Information Literacy Programmes*

compulsory programme for the undergraduates as implemented by University of Malaya. We agree that it is the only way to ensure that information skills imparted to the undergraduates are effective and benefit them throughout their study as well as to develop life long learners in them.

#### **REFERENCES**

- American Library Association. 2000. *Information literacy competency standards for higher education*. Chicago, Illinois: ALA.
- Behrens, S.J. 1994. A conceptual analysis and historical overview of information literacy. *College and Research Library*, Vol. 55, no. 4: 309-322.
- Bruce, C. 1995. Information literacy: a framework for higher education. *The Australian Library Journal*, Vol. 44, no.3 :158-170.
- Breivik, Patricia Senn. 1998. *Student learning in the information age*. US: ORYX Press, Council on Education.
- Bundy, Alan. 2000. Information literacy: the foundation of lifelong learning. Paper presented at the *Lifelong Learning Annual Conference of the South Australian Association of School Parents Clubs(SAASPC)* 15-16 August 2000.
- Chall, Devindar Kaur and Tan-Lim Suan Hoon. 1997. A survey of library skills and computer literacy of new students entering the University of Malaya. *Kekal Abadi*, Vol. 16, no. 4: 1- 11.
- Chan Sai Noi and Zaharah Ramly. 2001. Information literacy course (GXEX 1401); a survey of it's effectiveness as perceived by students. *Kekal Abadi* , Vol. 20, no. 1:1 – 7.
- Changing university teaching: reflection or creating educational technologies*. 2000. UK: Kogan Page.
- Council of Australian University Librarians. 2001. *Information literacy standards*. Canberra: Council of Australian University Librarians.

**Maimunah, K. & Mohd. Sharif M.S.**

Davidoff, Frank and Valerie Florance. 2000. The Informationist: a new health profession? *Annals of Internal Medicine*, Vol. 132, no. 12: 996-998

Doyle, C. 1994. *Information literacy in an information society: a concept for the information age*. Syracuse, N. York: ERIC Clearinghouse.

Ford, B. J. 1991. Information literacy as a barrier. *IFLA Journal*, Vol. 21, no. 2: 99-101.

Hancock, V.E. 1993. *Information literacy for lifelong learning*. Syracuse, NY: ERIC Clearing house on Information Resources. (ERIC Digest ED358870)

Horton, F.W. 1983. Information literacy vs. computer literacy. *Bulletin for The American Society Information Source*, Vol. 9, no. 14.

Julien, Heidi. 2000. Information literacy in academic libraries: longitudinal trends and international comparisons. *College & Research Libraries*, Vol. 61, no. 6: 510-532.

Kirk, J. Thomas G. 1999. Course-related bibliographic instruction in the 1990's. *Reference service Review*, Vol. 27, no. 3: 235-242.

Kotter, J. P. 1995. *The new rules*. New York: Free Press.

Kulthau, Collier Carol. 1987. *Information skills for an information society: a review of research*. Syracuse, New York: ERIC.

Laila Hassan dan Azizah Zainal Abidin. 1997. Information literacy programme in the digital era at Universiti Putra Malaysia Library. Paper presented at *Persidangan & Worksyop Kebangsaan Perkhidmatan Perpustakaan: Ke Arah Pengurusan Maklumat Cemerlang Menjelang Abad ke 21*, Kuala Lumpur, 18-21 Ogos 1997.

Mahathir Mohamad. 1997. *Vision 2020 : Malaysia towards establishing a fully developed nation*. Kuala Lumpur: Kementerian Penerangan.

Maughan, Davitt Patricia. 2001. Assessing information literacy among undergraduates: a discussion of the Literature and the University at California – Berkeley assessment experience. *College & Research Libraries*. Vol. 62, no. 1: 71-82.

*Developing Life Long Learners Through Information Literacy Programmes*

- Mohd Sharif Mohd Saad and A.N. Zainab. 2002. Information literacy programmes in Malaysian public universities: an observation. Presented at the 68<sup>th</sup> IFLA Council and General Conference, 18 – 24 August 2002, Glasgow, Scotland.
- Nimon, Maureen. 1999. Striking the right balance: information literacy and partnership between librarian, lecturer and student. Presented at the 4<sup>th</sup> National Information Literacy Conference conducted by The University of South Australia and The Australian Library and Information Association, Adelaide, Australia, 3-5 Dec. 1999.
- Rader, Hannelore B. 2000. A Silver Anniversary : 25 years of reviewing the literature related to user instruction. *Reference Service*, Vol. 28, no. 3.
- Shelstad, Kirsten R. and Frederick W. Clevenger. 1994. On-line search strategies of third year medical students: perception vs fact. *Journal of Surgical Research*, Vol. 56, no. 4, Apr: 338-344.
- Spitzer, Kathleen L.B.; Michael Eisenberg, and A. Carrie Lowe. 1998. *Information literacy: essential skills for the information age*. Syracuse, New York: ERIC.
- Wallace, Margaret C., Allison Shorten and Patrick A. Crookes. 2000. Teaching information literacy skills: an evaluation. *Nurse Education Today*, Vol. 20, no. 6: 485-489.
- Yeboah, Theophilus. 1999. The management of information literacy skills programme for science undergraduate at the University of Botswana. *African Journal of Library Archives and Information Science*, Vol. 9, no. 2: 143-152.
- Zaiton Osman, Chan Sai Noi and Devindar Kaur Chall. 1998. Developing IT skills through information skills (IS) programmes. Presented at the PPM/LAS Joint Conference, Kota Kinabalu , 22 – 24 June.
- Zurkowski, Paul. 1974. *The information service environment relationships and priorities*. Washington, DC: National Commission on Libraries and Information Services.

