Lifelong Learning Skills: ICT & Information Literacy

Harvinder Kaur Dharam Singh, harvinder@oum.edu.my
Open University Malaysia
Jalan Tun Ismail, Kuala Lumpur, Malaysia.
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Abstract

One of the primary goals of education is to teach a learner how to learn and how to cope with the challenges in life. In view of that, a course namely Learning Skills for Open And Distance Learners was introduced as a compulsory course to all first semester learners at Open University Malaysia (OUM). The course aims to provide lifelong learning skills which intend to help them in their learning during the university tenure, of which two important components includes basic ICT and information literacy skills. This paper explains the importance of these skills for successful learning, and how learners have perceived their ICT and information literacy skills after following through the said course. A questionnaire was developed and used to gather data from learners. 330 learners responded to the questionnaire that was uploaded in the web. The findings showed that majority of the learners admitted to have successfully acquired basic ICT but, a significant number of learners continue to seek skills in information literacy even after completing the course.

Keywords
lifelong learning skills, ICT skills, information literacy skills

INTRODUCTION

Learning is a life long experience. It can occur at anytime and anywhere; and can be acquired through formal and structured training courses in school or at work, or informally via day-to-day experiences. The mass of information available at a click of a technology, has often presumed that learners are able to access it easily without much problems. It is dubious to assume that lifelong learning is taking place by merely providing high-end technologies and immense information. Until unless the learner "can learn effectively, there will not be any effective engagement in lifelong learning" (Conford, 2000).

Within the diverse context of learning and range of skills required to successfully pursue learning, both ICT and information literacy skills are intertwined with one another and are vital part of learning skills. The fundamental notion highlighted here is that in today's digital information era, first, a learner must have some basic competency in ICT for searching and interacting with information effectively and second, have the aptitude in information literacy to be a discern learner dealing with vast digitised information. Without the foundational skills and abilities associated with retrieving information, learners will not benefit from the knowledge provided in the content.

For the purpose of this paper, basic ICT includes the use of software and hardware tools – Microsoft Office Applications (such as word processing, spreadsheet, presentation), database

applications, Web applications; and internet services – learning management system (myLMS), e-mail, Web browsing, electronic databases and library databases.

ICT had made tremendous impact on the society, and transformed the way human work, learn, communicate and live. ICT skills are applied for seeking and exploiting information in almost all human activities. It remains the key aspect in an information society for accessing lifelong learning. Miliszewska (2008) argued the necessity of developing advanced ICT skills and disregarding it would be to ignore an essential part of university education in today's global economy.

Information literacy is about the ability to recognise the need for information, locate, evaluate and use information effectively (Plotnick, 2000; Philip, 2002). Institutions are acknowledging their role in preparing learners for lifelong learning and are looking for ways of enabling students to learn in new, deeper and more meaningful ways. One such way of learning is via information literacy; that is learning through interacting with and using information to construct new understanding (Kuhltau, 2000). Learners have indicated the need for instruction on how to access library services and how to access information in electronic format (Schafer, 1998).

Thus, these skills are for life and significant in "bridging the digital divides" in order to get the leaner across the path of learning without much adversity. Learners should be trained in skills of learning, which will continuously support them to learn on their own for the rest of their lives. In fact, one of the primary goals of education is to provide learning skills which teaches learners how to learn and how to cope with challenges in life. Learning skills are provided to learners to encourage participation in learning and to spread positive motivational affirmation about learning. It does not limit to the extend of how to learn content, but also includes attaining new skills dealing with technologies and information for effective searching, understanding and presenting information. Learning skills is about training a learner for lifelong learning.

THE COURSE: LEARNING SKILLS FOR OPEN AND DISTANCE LEARNER

The OUMH1103 course *Learning Skills for Open And Distance Learners* was first offered in January 2004 semester. The course is compulsory to all first semester learners at OUM. The face-to-face sessions of the course are intentionally held in computer laboratories for hands-on practice under the facilitation of tutors. It is designed to equip learners with adequate knowledge and skills so that they can maximise their learning in the variety learning methodologies provided to them. There are three major sections written in the course module: Learning to Learn Skills, Basic ICT Skills for Learning and Searching for Information Skills. These sections are further sub-divided into 10 topics:

- Managing Your Learning
- Online Learning Environment in OUM
- Reading for Information
- Note-making and Note-taking Skills
- Presenting Information
- Coping with Your Assessments
- Information Gathering Processes
- Skills in Information Retrieval
- Evaluation Information

- Using Microsoft Applications (MS Word, MS Excel, and MS PowerPoint)

The first part, 'Learning to Learn Skills' aims in enhancing independent learning, self-assessment skills, study related skills and strategies such as time management, managing stress, motivation, goal setting, reading skills as well as making and taking notes skills. Learners will learn basic ICT skills such as creating documents as well as presenting information using Microsoft Office Applications, browsing the Internet and the in-house developed learning management system (myLMS). Under 'Searching for Information Skills' (also referred as information literacy skills) component, learners will learn the process of gathering and retrieving information using Online Public Access Catalogue (OPAC), electronic databases and the Internet. Learners will also learn to determine the authenticity of information.

In 2006, the module has received the 'Commonwealth of Learning (COL) Excellence in Distance Education Award for Distance Education Materials'. It will be interesting to evaluate the success of OUMH1103 course by ascertaining the learners' perception whether they have accomplished Basic ICT for Learning and Information Literacy skills as the course has aimed for.

LEARNERS' PERCEPTION OF THEIR SKILLS

The following sections of this paper reviews to what extend the learners have perceived to acquire skills in basic ICT and Information literacy. The survey was administered in May 2007 semester. A questionnaire containing demographics, 25-Likert type statements and three-opened ended questions was developed and used to gather data from learners. However, only relevant items of the questionnaire will be discussed for addressing the purpose of this paper.

The demographics of the respondents were close to that of OUM's learners on the whole. A total of 330 learners responded to the questionnaire; consisting 56% of females (185) and 44% of males (145). Majority of the respondents were from: 30-39 years age group with 46% (153), Faculty of Business Management with 38% (125), and studied in Year 2 with 58% (192).

Respondents were asked to rate each one of the 25-items in the questionnaire on a 1-5 Likert scale from "1 = strongly disagree" to "5 = strongly agree" and 3 = "uncertain".

The Cronbach's Alpha values were used to measure inter-item reliability of the items in tables 1 and 2. The values were more than 0.05, with 0.829 respectively for both variables (i.e. basic ICT skills and information literacy skills). Therefore, the questionnaire response for both variables is consistent and reliable.

Table 1: Basic ICT Skills for Learning

Question	% Agreed	Mean	Mode	Std. Dev.
I am able to effectively apply the skills I learn about myLMS.	83.03	4.02	4	0.803
This course has given me the skills to use the Internet.	85.76	4.09	4	0.888
Now, I am more able to effectively use MS Word.	87.23	4.20	4	0.847
Now, I am more able to effectively use MS Excel for creating charts.	71.82	3.85	4	0.959

Now, I am more able to effectively prepare MS PowerPoint slide.	82.42	4.05	4	0.856

Table 1 shows that above 70% of the learners (with means score above 4.0) indicated that they have acquired the basic ICT skills that was taught in the course. It is probably due to OUM's policy, that advocates active participation in learning activities associated with computer, the Internet and myLMS. However, some learners expected more guidance in MS Excel as stated in their comments on how the course could be improved:

- "need to know how to use Internet";
- "more explanation and concentration based on ms office especially ms excel";
- "more hours needed for those who have little knowledge for excel and powerpoint. We need to present and do more assignments then we will be able to perform well in charts or graphs";
- "(focus) specific(ally) on MS Excel and charts";
- "add more information on computer hardware and software".

On the other hand, some learners were of the opinion that certain topics with regards to ICT were unnecessary and a waste of time of learning it, as they already have the knowledge in it. An important point to be noted, that learners come in with a diverse level of ICT competency, hence the course should be able to cater all range of learners and avoid superfluous learning experience for any particular group of learners.

Table 2: Information Literacy Skills

Question	% Agreed	Mean	Mode	Std. Dev.
I know how to get an overview of content.	88.48	4.03	4	0.647
I have difficulty to search for information effectively. #	57.27	3.43	4	1.056
I have applied the skills I had learnt to use the OUM Digital Library.	52.42	3.38	4	1.040
I cannot decide on which information is suitable for my assignment. #	64.55	3.63	4	0.976
I use scholar/academic information for my assignment.	70.30	3.74	4	0.843

[Note: # - scales were reverted accordingly for stems that are negatively worded.]

While, more than 50% of the respondents agreed to be able to perform the information literacy skills (with mean score ranging from 3.38 - 4.03), however there is a considerable number of learners who are struggling to master the skills and sees problems in looking for information effectively (Table 2). Concerns were shown with regards to application of skills in searching, evaluating and subsequently using the information in preparing their assignments. Learners seem to be deficient in applying ICT skills for retrieving information, specifically using OPAC and electronic databases. It is in contrary to their confidence in applying ICT skills for myLMS, the Internet and MS Office Application as depicted in Table 1.

This is further confirmed and supported by the suggestions from learners on matters that need to be enhanced and incorporated in the course. The following are some of the common comments reported:

- "how to use e-library effectively"
- "ways to use the OUM library effectively"

- “I would like to know more detail how do get information from digital library”
- “introduction more about digital library, for example, what is ebrary*, emerald* etc, their differences and usage”
- “step-by-step guide on how to search information in digital library”
- “effective ways to search for information on the internet”
- how do select information from internet that can be use for our assignment
- “topic 3-reading for information. more information on how the skills help learners and what type of information should they read.”

[Note: * refers to digital collection titles in the OUM Digital Library.]

Despite, completing three specific topics in the module related to information literacy skills, learners felt that the course had insufficient content on ways to search information effectively, in particular using the OUM digital library and the Internet. It is an indication of reflection of themselves, for lacking the abilities in such skills.

Nevertheless, when the respondents were asked how they perceived the whole course, 87.88% of them agreed (with mean score 4.20, std dev. 0.839) that the course was helpful in their learning in OUM.

An interesting phenomenon has immerged from this study, which need further investigation to find ways in improving the shortcomings of the OUMH1103 course. Where the course did went wrong, was it the module, or the assessment method or the tutor, or the technology facility, or was it the learners themselves? Could it be a combination of these aspects? An examination in these elements will probably disclose imperative attributes that has effect on their learning skills in particular, information literacy. Importantly, the course must be able to facilitate learners’ transition in their aptitude from novice to an advanced level. It should encourage and enable students to have successful participation in learning.

It is undeniable that implementation of a structured course on lifelong learning skills is crucial, and so is the evaluation of the course’s learning outcomes, because that is the fundamental purpose of its existence. This will provide a better inference of the course, hence essential steps can be taken for its enhancement. Continuous efforts need to be implemented in such endeavour to achieve the course’s goals.

CONCLUSION

The journey of learning is endless and has no limitation in acquiring new and advance knowledge and competency. But, for an effective engagement in learning, a lifelong learner has to collectively exhibit both basic ICT and information literacy skills.

While creditable efforts are made in bridging OUM learners in attaining lifelong learning skills, its accomplishment is debatable. At one hand, OUM learners have perceived to adequately acquire ICT skills, on the other hand, a large number of them reported to have insufficient abilities to perform information literacy skills. Thus, appropriate mechanism has to be put in place to address this issue. Further investigation is needed to re-look into the attributes and methodologies that affect the teaching-learning of the course.

REFERENCES

Cornford, I.R. (2000). *Learning-to-learn Skills for Lifelong Learning: Some Implications for Curriculum Development and Teacher Education*. Presented at AARE Annual Conference, Sydney, 7th December, 2000. [Online]. Available: http://www.aare.edu.au/00pap/cor00382.htm [2000, May 20].

Kuhlthau, C.C. (1999). Literacy and Learning for the Information Age. In Stripling, Barbara K., *Learning and Libraries in an Information Age:Principles and Practice.* Littleton: Libraries Unlimited.

Miliszewska, I. (2008). *ICT Skills: An Essential Graduate Skill in Today's Global Economy?* Proceedings of the Informing Science & IT Education Conference (InSITE), Victoria University, Melbourne, Australia. [Online]. Available: http://proceedings.informingscience.org/InSITE2008/InSITE08p101-109Milis438.pdf [2008, May 26].

Philip C. C. (2002). Information Literacy and Lifelong Learning. White Paper prepared for UNESCO, the U.S. National Commission on Libraries and Information Science, and the National Forum on Information Literacy, for use at the Information Literacy Meeting of Experts, Prague, The Czech Republic. [Online] Available at: http://www.nclis.gov/libinter/infolitconf&meet/candy-paper.html [2008, May 27]

Plotnick, E. (2000). Definitions/perspectives (information literacy). *Teacher Librarian*, 28(1), September, 27-9.

Schafer, S. (1998). Student Satisfaction with Library Services: Results of Evaluation Using Focus Groups. In Thomas, P.S. and Jones, M. *The Eight Off-Campus Library Services Conference Proceedings*. Providence, Rhode Island, April 22-24, 1998, Central Michigan University.

Biographies

Harvinder Kaur is an academic staff at Open University Malaysia and has been actively involved in numerous institutional researches related to collaborative online learning, learner performance in assessments and lifelong learning. She has participated and wrote several conference papers locally and internationally mostly in these areas.