

Problems of Lifelong Education Course in Information and Communication Technology

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Abstract—The study is the way to identify the problems that occur in organizing short course's lifelong learning in the information and communication technology (ICT) education which are faced by the lecturer and staff at the Mara Skill Institute and Industrial Training Institute in Pahang Malaysia. The important aspects of these issues are classified to five which are selecting the courses administrative. Fifty lecturers and staff were selected as a respondent. The sample is selected by using the non-random sampling method purpose sampling. The questionnaire is used as a research instrument and divided into five main parts. All the data that gain from the questionnaire are analyzed by using the SPSS in term of mean, standard deviation and percentage. The findings showed, there are the problems occur in organizing the short course for lifelong learning in ICT education.

Keywords—Lifelong education, information and communication technology (ICT), short course, ICT education, courses administrative.

I. INTRODUCTION

LIFELONG education conceptually covers a very broad sense. This concept refers to the process of democratization of education include programs to improve the knowledge, skills and competences either formally in schools, vocational training centers, or informally by experience and training in the workplace.

In an organization, this concept refers to the process of obtaining knowledge and experience to enhance skills. According to [15], lifelong education in information and communication technology (ICT) requires an employee to understand the whole system work, including the relationship between their work, their work units and organizations. It is hoped that workers acquire new skills such as ICT skills, to use it in the program of work at the office or make projects and share information with other colleagues.

In Malaysia, the lifelong education was pioneered by Majlis Amanah Rakyat (MARA) which was to have set up Pusat Giat MARA consisting of short courses. According to the report of [5], Malaysia was represented by Majlis Amanah Rakyat (MARA) have already showcased their lifelong education Institution known as Pusat Giat MARA which functions to provide vocational skills training and technology to youth aged 15 years to 40 years.

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The program is fully funded by the Government of Malaysia is the contribution towards the development of entrepreneurs. The strategies involved in this program are the establishment of training centers, especially in urban and rural areas which involve the local community.

Education and training in a Lifelong Learning allow adults to identify and realize the potential and personal development that exist or new skills required. Education is no longer a system or machine, but it has now become a lifetime requirement [17]. The study [1] on ICT education and training among adults found that the matters considered by an individual's effort is that they believe that if they worked hard to learn knowledge and have access to appropriate qualifications and from there then one can follow the direction of adults as required. Therefore, based on studies by [10] about the educational challenges faced by students, adults, researchers interested in studying what are the problems that arise by the entities, educational institutions and training of Malaysian life long term education program in particular consists of the student in order to produce skilled manpower to meet the needs of the country you want. The problem is that the problems faced by institutions in implementing lifelong education in information and communication technology (ICT).

E-learning begins with the ability to access Web sites on the Internet which gives access to a wide range of e-learning resources, including access sites information, programs and options that use hypermedia-based learning the attributes and resources of a WWW site so happens that the real learning environment [2]. E-learning can occur either formal is a special program run by the institutions and virtual university or a source of information management informally as the location of the virtual discussion. So, Web-Based Education (WBE) provides opportunity for adults pursue lifelong education.

ICT is causing the problem and the solution for Lifelong Education. It is a huge problem with this type of reverse benefits that brings. Information overload, lack of privacy, safety concerns, and behavioral addictions are just a few of the many dangers of this technology brings. In addition, there are significant costs attached to providing equal access, training and support. However, the fact that ICT produce major changes in both content and learning process, as we do not have the option to ignore it's methodology Research.

A. Problem Statement

Lifelong Education, prompting a major platform in the course of Information Technology and Communication (ICT) and other short courses in skills training institutions. This is

because of Lifelong Education could provide in terms of improving knowledge, skills and attitudes in the field of ICT and other fields to produce highly competent individuals who are required by the industry. Therefore, the institution that hosts the Lifelong Education program in ICT programs cannot avoid facing various problems such as the choice of courses, design a marketing strategy, providing participants, preparation and administrative problems of the course module. Moreover, the researchers wanted to examine whether or not there is the problem of training institutions in organizing short courses in their program of study.

B. Objective of Study

This study is aimed to obtain information and actual problems or challenges faced by those who organized Lifelong Education short courses with a view of several factors:

- i. Identify the obstacles in the selection of ICT courses among organizers.
- ii. Identify problems in the promotion of a program of short courses among organizers.
- iii. Identify difficulties in the provision of facilities for course participants.

II. THE REVIEW OF RELATED RESEARCH

Globalization brought changes in technology to the public. The explosion of information and great capacity digital technology and computing power especially challenged

Education systems, including learning theory are also changing. Now the concept of virtual universities provides learning environments remotely or on-line (online) via the World Wide Web (www) with the help of information technology equipment and communication. This is a simulation tool that allows students to experience real learning experience and can interact with other people without face to face. The facility is to be an agent of socialization of the individual claiming the best ever updating of knowledge, knowledge and skills throughout their lives. But the study found that it still has issues and challenges that need to be handled with wisdom. The concept paper explores the role and challenges of lifelong learning based on e-learning among adults [13].

E-learning theory argues that students are able to control them better learning through collaborative learning opportunities, interactive and personal as electronic media provide a learning environment based on the principle-Just-in time with competence-anywhere, anytime, anyone! [12]. This concept is consistent with the theory that adults learn andragogy with self-motivation [4].

According to [6], the theory of working memory, which states that learning through multimedia cause the brain to work directly encode two types of information, namely the stimulation of audio and visual stimulation. Study psychology proves that verbal information will be easier to remember if accompanied by visual images. The theory is then applied by introducing Richard Mayer two multimedia coding theory, according to this theory the students more easily transfer their learning through multimedia instructions that affect cognition

(Cognitive Theory of Multimedia Learning). Based on the findings, the researchers found that the mean frequency and the use of ICT among teachers who serve in rural schools still at a moderate level. They noted that time constraints become a major barrier for them to use computers and ICT in the classroom. In addition, the mean of the level of skills among teachers also is in the medium level. This means fewer rural teachers were given training and courses related to the use of computers and ICT. Obstacles that arise in the use of computers and ICT among teachers in the classroom is relevant to the time factor, the factor of training, attitude and more. In this era of advanced technology, the researchers found that there are still a handful of rural teachers who are not interested at all to use this advanced technology. It is hoped that all teachers irrespective of whether the work in urban or rural areas can change their perception of the use of computers and ICT can facilitate their learning process [9].

According to [16] in terms of curriculum development opportunities and partnerships are given great importance of accountability as well as competition. When viewed from the aspect of the threat factors, many state college competition is the most important threat. What can be noted here is that educational institutions showed positive competition to increase the quality which makes a negative aspect as a threat.

In marketing it focuses on products and sales, advertising and promotion can be a major activity in order to attract the students or participants of the courses offered. By [14], in terms of philosophy, marketing needs to be more focus on identifying needs and developing curricula that meet the needs of participants. In the advertisement made either through information and communication technology (ICT) must state the characteristics of the courses offered and the qualifications of the participants clearly. This is important to enable participants to make a selection and also to facilitate the administration in terms of management.

According to [3], the technology can make lifelong learning a reality is written in one of the listed references. The concept of lifelong learning in the EU member states differs significantly and their efforts seem to be partly mismatched. Even in different concepts the modern information technology support is becoming the foundation of the efficient and cost-effective lifelong learning. The e-learning technology is becoming progressively sophisticated, which has several positive effects, though on the other hand the complex technology makes some learners feel uncomfortable. Innovations in e-learning information systems should take special care of this effect when dealing with lifelong learners, since the level of the information literacy in this group varies a lot. A good example of the technology innovation is the personalization which makes e-learning systems friendlier and diminishes the well-known technology barrier.

III. METHODOLOGY OF RESEARCH

A. Research Design

This study was conducted in the quantitative research form through a descriptive survey method which uses a

questionnaire. Data gathered by using a questionnaire which circulated to respondents to seek relevant information related to this study. This is a non - experimental survey method. This study was conducted in the quantitative research form through a descriptive survey method which uses a questionnaire. Data gathered by using a questionnaire which circulated to respondents to seek relevant information related to this study. This is a non - experimental survey method. This study used quantitative methods. According to [8], to use the method of quantitative study is to analyze the measurement of central tendency to determine the mean, standard deviation, and the percentage verify the findings. According to [7], the position of the mean value is measured, while the standard deviation is the dispersion index of a distribution of scores.

B. Population and Samples

The study population consisted of a facilitator and organizer of lifelong learning related to ICT in The MARA Enterprising Center Pekan, Pahang and The Industrial Training Institute, Kuantan, Pahang. The sample used by the researchers is that the sampling is not random sampling of purpose. According to [11], sampling is the researchers' aim was to deliberately select a sample with the aim of obtaining a representative sample of the total population. In this study, the researcher has selected a total of 50 samples, which engage as the facilitators and staff in technical and vocational engage in the lifelong education program to run ICT courses.

C. Data Analysis

In this study, researchers used a simple statistical procedure. The mean value is considered during the data analysis of this study. They are shown in the table form. Proceed mean values displayed in the diagram form in order to facilitate the reader to understand it. Overview of this study shows that using the ranking, so researchers use ordinal data. To facilitate interpretation of the findings of the statement of the problem faced by the organizer to organize short courses ICT Lifelong Education programs.

IV. RESEARCH FINDING

In this section researcher do the data analysis with respondent raw data scores. The data are analyzed by descriptive statistic. For description of research findings are shown in the form of Tables I-III.

Based on Table I, the data analyses show that the obstacles in the selection of ICT course among organizers are low.

Based on Table II, mean and standard deviation for the problems faced by the technique of promotion used to organize short courses in ICT and other courses. As for the whole result of the findings shown by respondent's decision with the mean value for Problems in the promotion of a program of short courses among organizers are low. The findings of the data analyses show the respondents very agreed with the main problem facing by the organizer are promoting the problem.

Based on Table III, mean and standard deviation for the problems faced by the course participants are moderate.

V. CONCLUSION

The findings of the research based by the problems facing by the organizer when organizing ICT short courses are answered by the 50 respondents from the four institutions. Problems face by MARA Enterprising Center, Institute of Industrial Training and Institute of Youth and Sport in Pahang State is time limited, general courses, expert trainers, course offer and skill offer.

TABLE I
THE OBSTACLES IN THE SELECTION OF ICT COURSES AMONG ORGANIZERS

No	Course Selection Problem Statement	Mean	SD	Level Interpretation
A1	Time-limited review courses	2.40	0.756	Low
A2	New library specifies a general course	2.50	0.974	Low
A3	Based on the expertise of trainers	3.22	0.737	Moderate
A4	Longer time to take the course	1.82	0.748	Low
A5	Similar course offers	2.76	0.916	Low
A6	Ordinary skill offer	3.08	0.944	Moderate
Total mean		2.63	0.465	Low

TABLE II
PROBLEMS IN THE PROMOTION OF A PROGRAM OF SHORT COURSES AMONG ORGANIZERS

No	Course Selection Problem Statement	Mean	SD	Level Interpretation
B1	Advertisement in newspaper	2.26	0.853	Low
B2	Banners advertisement method	2.02	0.589	Low
B3	Pamphlet distribution	1.78	0.648	Very Low
B4	Promotion at school	2.08	0.634	Low
B5	Make a promote at firms and industries	2.38	0.697	Low
B6	Information Technology and Communication (ICT)	2.38	0.635	Low
B7	Distribute with the newspapers	2.60	0.728	Moderate
B8	TV and Radio advertisement	2.28	0.809	Low
B9	Time to promote the courses	2.24	0.591	Low
B10	Insufficient budget	2.80	0.904	Moderate
Total mean		2.282	0.369	Low

TABLE III
THE PROVISION OF FACILITIES FOR COURSE PARTICIPANTS

No	Course Selection Problem Statement	Mean	SD	Level Interpretation
C1	Equipment is ordering	2.40	0.639	Moderate
C2	Late delivering the order	2.56	0.675	Moderate
C3	Trainee facilities	2.46	0.788	Moderate
C4	Teaching aids	2.50	0.814	Moderate
C5	Trainees' comments (unhappy feeling)	2.34	0.688	Moderate
C6	Budget application	2.52	0.789	Moderate
Total mean		2.46	0.499	Moderate

REFERENCES

- [1] Ahmed, B.T. (2006). WiMAX in High Altitude Platforms (HAPs) communications. Proceeding of the 9th European Conference on Wireless Technology, p. 245 – 248.
- [2] Ahmed, B.T. & Ramon, M.C. (2009). WiMAX in High Altitude Platforms (HAPs) communications other large cities. Proceeding of the 6th International Multi-Conference on System, Signals and Devices, p. 1–4.
- [3] Abu Bakar, B. (2002). Basic Measurement Class Room, Perak: Quantum Books,

- [4] Ausburn, L. J., & Ausburn, F. B. (2004). Desktop Virtual Reality: A Powerful New Technology for Teaching and Research in Industrial Teacher Education. *Journal of Industrial Teacher Education*, 4 (4).
- [5] ASEM, (2008). Reports of the ASEM (2008) at the meeting.
- [6] Baddeley, A.D. & Hitch, G.J. (1994). Developments in the concept of working memory. *Neuropsychology*, 8, 485–493.
- [7] Bhasah, A. B. (2003). *The measurement principle Classroom*. Tanjung Malim: Quantum Books Perak.
- [8] Hashim, J. & Yunus, F. A. N. (2011). Virtual reality simulator developed welding technology skills. *Proceedings of the IETEC'11 Conference*, Kuala Lumpur, Malaysia.
- [9] Hassan, J. & Kamisan, S. N. (2008). Use Computers And Ict In The Teaching And Learning (R & D) Secondary School Teachers In The National Rural. *Proceedings of the National Seminar on Science and Mathematics Education 2008*, 11 to 12 October 2008, Universiti Teknologi Malaysia.
- [10] Ippolito, L.J. (2008). *Satellite Communications Systems Engineering*. West Sussex: John Wiley & Sons, Ltd.
- [11] Iskandar & Putro, D.R. (2008). Performance evaluation of broadband WiMAX services over High Altitude Platforms (HAPs) communication channel. *The 4th International Conference on Wireless and Mobile Communications*, p. 55 – 59.
- [12] Karoulis, A. et al. (2004). An Expert-Based Evaluation Concerning Human Factors in ODL Programs: A Preliminary Investigation. In *E-education Applications: Human Factors and Innovative Approaches*. (Claude Ghaoui, editor). UK: Idea Group Inc.
- [13] Kassim, Z., & Ahmad, A. R., (2010). E-Amalan: Evolusi Internet Dalam Amalan Sepanjang Hayat. *Proceedings of Regional Conference on Knowledge Integration in ICT 2010.(SME) Managers: A Study in Shah Alam, Malaysia*. Research Report. Shah Alam: Universiti Teknologi MARA.
- [14] Lumby, J. (2001). *Managing further education: learning enterprise*, London, UK, Sage Publications, 224pp.
- [15] Raymond, N. A. (2002). Human Resources Accepting More Competitive. In Jonathan, H. (2003). *Longlife Education*.
- [16] Osborne, M. (Ed) (2003). Lifelong learning in a changing continent, NIACE, England and Wales, 2003, p. 4.
- [17] Osman, R. (2007). Equity, Access and Success: Adult Learners in Public Higher Education. In *CHE Review of Higher Education in South Africa*. South Africa: CHE, pp. 1–41.