THE EXPERIENCES OF COMPUTER TECHNICIANS ENGAGING IN LIFELONG LEARNING (LLL): A STUDY IN A PUBLIC UNIVERSITY

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Bachelor of Science with Honours (Human Resource Development) 2015
THE EXPERIENCES OF COMPUTER TECHNICIANS ENGAGING IN LIFELONG LEARNING (LLL): A STUDY IN A PUBLIC UNIVERSITY

LIM WEI CHEIT

This project is submitted in partial fulfilment of the requirements for a Bachelor of Science with Honours (Human Resource Development)

Faculty of Cognitive Sciences and Human Development
UNIVERSITI MALAYSIA SARAWAK
(2015)
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ACKNOWLEDGEMENT

First and foremost, I would like to thank my respected supervisor, Miss Wan Sofiah binti Meor Osman for her unfailing interest, support and advice from the beginning until the end of this final year project. She has been the constant sources of knowledge and has kept me on track and focused right from the beginning. Despite some setbacks and changes along the way, she seemed never to doubt that this project could be successfully accomplished. Her considerable knowledge and expertise have provided me inspiration and guidance throughout the journey.

Thanks also to the organization and participants who willingly and generously cooperated with me during my data collection process. I am sure their contribution goes a long way towards the knowledge regarding lifelong learning.

My thanks also go to my parents, seniors, coursemates, buddies and friends who contributed and helped me in various ways. Without them, I may never have got this far. This dream has finally turned into a reality mainly due to their unlimited love, support, encouragement and help.

Thank you all. It has been a long, tiring but interesting journey. Without supports from all of you, I doubt I would have reached the destination.
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ABSTRACT

THE EXPERIENCES OF COMPUTER TECHNICIANS ENGAGING IN LIFELONG LEARNING (LLL): A STUDY IN A PUBLIC UNIVERSITY

Lim Wei Cheit

Lifelong learning (LLL) in the workplace is still a new concept and its practices in the workplace have not been fully understood. This research aims to explore the experiences of computer technicians engaging in LLL in an IT centre of a public university. The contextual data of LLL, the perspectives of computer technicians on the importance of LLL and the source of constraints faced by them were studied. This was a qualitative study and it was conducted using phenomenological approach. In-depth interview was used as the research method of this study. Four computer technicians were interviewed and thematic analysis was used to analyze the data. The main theme for the overall experiences for their engagement in LLL was workplace learning while the themes for contextual data were continuous learning, workplace daily activities, learning for work and life, learning from work, people and environment and formal, informal and non-formal learning. The themes for the importance of LLL were self's benefit and other's benefit while the themes for the source of constraints were organization and person. This study could be used as a reference or guidance for future researchers. Through this study, organizations would support their employees aggressively to engage in LLL and the employees would be able to engage in LLL effectively.

Key Words: Lifelong Learning; Workplace; Experiences; Computer Technicians; Perspectives; Importance; Constraints; Qualitative; Phenomenology; In-depth Interview
ABSTRAK

PENGALAMAN PENGLIBATAN JURUTEKNIK KOMPUTER DALAM PEMBELAJARAN SEPANJANG HAYAT: SATU KAJIAN DI SEBUAH UNIVERSITI AWAM

Lim Wei Cheit


Kata-Kata Kunci: Pembelajaran Sepanjang Hayat; Tempat Kerja; Pengalaman; Juruteknik Komputer; Perspektif; Kepentingan-kepentingan; Kekangan-kekangan; Kualitatif; Fenomenologi; Temu Bual Mendalam

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CHAPTER 1
INTRODUCTION

1.1 Introduction

This chapter presents a background of study that discusses lifelong learning (LLL). Besides, problem statement, research objectives, research questions as well as research framework are stated. In addition, significance of the study and definition of terms are clarified. Lastly, the chapter is ended with a conclusion.

1.2 Background of Study

According to the Ministry of Higher Education Malaysia (2011), in its Blueprint on Enculturation of LLL for Malaysia 2011 to 2020, the population of Malaysia is expected to expand and reach 34.3 million in 2020. Malaysia would have working age group from 15 to 64 years of 26.2 million. Hence, more employment and training opportunities are critically needed at that time. LLL is therefore significant as the human capital can be developed through the learning that is beyond formal setting (Idris' study as cited in Singh, n.d.). As a result, those adults who are working and had missed the opportunity to pursue higher education would have another chance to improve their qualifications (Ministry of Higher Education Malaysia, 2011).

The knowledge, skills and aptitudes of the population need to be improved through LLL so that they will be equipped with the ability and competences to adapt to the changes brought by globalization, the rapid pace of technological advances as well as knowledge-based economy (Ali, 2005; Buntat et al. 2013; European Commission, 2007; European University Association, 2008; Laal & Salamati, 2012). Malaysia is seen to acquire belief in the critical importance of LLL and meet the challenges through its adoption of LLL (Law, Lee, Ong, & Cahyadi, 2009; Ministry of Higher Education Malaysia, 2012). The government has invested a lot in education sector and LLL as well
to produce quality human capital where their expertise level is improved as is expected or demanded (Mohamad, Che Razali, & Abd Jalil, 2009).

LLL is also an extremely important thrust in ensuring nation's economic development success and at the same time being the "third pillar" in empowering human capital development. According to Bahroom and Abdol Latif (2014), there is an urgent need for Malaysia to have knowledge workers in order to achieve Vision 2020. Therefore, LLL has been adopted as New National Agenda of Malaysia for achieving the vision (Ministry of Higher Education Malaysia, 2011).

According to Aziz, Chooi, Nor, and Fadil (2013), various ministries as well as agencies in Malaysia are responsible to carry out the LLL initiatives and the initiatives are greatly emphasized by the Ministry of Higher Education Malaysia. There are five categories of institutions under the Ministry of Higher Education Malaysia implementing the LLL initiatives namely, community colleges, polytechnics, public universities, private universities and university colleges and private colleges. Hence, the support from the education sector towards LLL is seen to be available in Malaysia (Transforming Education as an Engine of Growth, n.d.).

The Ministry of Higher Education Malaysia clearly states that LLL is supported through integration of distance learning, e-learning, workplace and part-time learning (Ministry of Higher Education Malaysia, 2011). It is because learning new skills and acquiring new knowledge is no longer restricted to formal educational settings such as classroom or school (Coşkun & Demirel, 2010; Klamma et al., 2007; Mohamad, Hassan, Silong, Raya, & Laut, 2004).

In order to further advocate the concept of LLL, there is a current development in the field of distance learning recently in September 2014 by the emergence of Massive Open Online Courses (MOOCs) in Malaysian Higher Learning Institutions especially the public universities under the Ministry of Education Malaysia. It is a type of online course aimed at large-scale participation of university students and open access via the web. The emergence of MOOCs is greatly suggested by Open Educational Resources in the Malaysian Higher Learning Institutions (Embi, 2013). Through the effort, it is believed that the culture of LLL could be formed successfully in Malaysia.
1.3 Problem Statement

According to Fadzil and Abdol Latif's study as cited in Kim (n.d.), LLL efforts are a relatively new phenomenon in Malaysia. The initiatives still need to be enhanced especially the provision and awareness for LLL. On the other hand, Ghebllawi, Goolamally, and Ahmad (2011) stated Malaysia is still uncertain whether it has a good supply of human capital such as knowledge and skilled workers. Besides, Malaysia is also not sure whether it has arrived at achieving the true meaning of LLL. Moreover, there is no confirmation on whether the target groups in the country have been benefited through LLL. In addition, the government is not emphasizing on LLL and hence a culture of LLL has not yet been embraced in Malaysia (Ghebllawi et al., 2011). Those who promote LLL are non-government organizations and individual associations. Different definitions of LLL have also been adopted where some of them are superficial while some are comprehensive (Ghebllawi et al., 2011).

Apart from the above, Mustafa, Yahya, and Muslim (n.d.) reported that the importance of LLL is understated in Malaysia. While on the other hand, Linton's study as cited in Mohamad et al. (2004) said that even though there are wide discussions on LLL, but LLL is not supported by powerful legislative and adequate funding.

Mohamad et al. (2004) claimed that the topic regarding LLL is always relevant and crucial to be studied on because there are emergences of technological advances, new economy, the need for k-workers and also new changes and challenges brought by the dynamic environments from day to day. What is not thoroughly discussed by previous studies is the numerous dimensions of LLL in the workplace and the required system to sustain it (Patrickson's research as cited in Mohamad et al., 2004). Little has also been explained on how organizations are able to create sustainable workplace learning in order to develop their employees to face the dynamic changes occurring within those organizations (Mohamad et al., 2004).

Mohamad et al. (2004) also stated that LLL has been practiced in different forms such as Human Resource Development, Training and Development, Organizational Learning, and Learning Organization in many organizations over the years. However, LLL in the workplace itself is still a new concept and LLL practices in the workplace
have not been fully and well understood. Therefore, a focus on practices of LLL in the workplace is needed in order for us to have a better understanding on those practices (Mohamad et al., 2004).

The issues and the focus gap that have been discussed above are the focus of this research. Thus, this research is conducted and aimed to study the issues mentioned and fill the focus gap by unlocking the concerns regarding the importance of LLL from the perceptions of computer technicians and the constraints faced by them when they engage in LLL.

1.4 Research Objectives

The research objectives of the study consist of a general research objective and three specific research objectives.

General Objective

To explore the experiences of computer technicians engaging in LLL.

Specific Objectives

i. To study the contextual data of LLL.
ii. To investigate the perspectives of computer technicians on the importance of LLL.
iii. To research the constraints faced by computer technicians when they engage in LLL.

1.5 Research Questions

The research questions of this study consist of a general research question and three specific research questions.

General Research Question

What are the experiences of computer technicians engaging in LLL?
Specific Research Questions

i. What are the contextual data of LLL?

ii. What are the perspectives of computer technicians on the importance of LLL?

iii. What are the constraints faced by computer technicians when they engage in LLL?

1.6 Research Framework

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<th>Issue</th>
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Table 1.1. Research Framework of the Study

Table 1.1 above shows the research framework of the study. The context of the study is LLL while the issues identified are the importance of LLL and the constraints faced by computer technicians when they engage in LLL. The method for conducting the research is in-depth interview.

1.7 Significance of the Study

This study is important to future researchers, the organization and the computer technicians.

1.7.1 Future Researchers

This study could be a reference and guidance for the future researchers who will be conducting researches on LLL. The future researchers could gain insight from the knowledge contributed by this study and may come out with new knowledge in another aspects that are related to LLL. They could also conduct further research based on this study as it is believed that the study about LLL would give much benefits and advantages. The impacts of the research are huge to mankind.
1.7.2 Organization

The organization will understand the ways and means to encourage the engagement of its employees in LLL. The organization will also support the employees aggressively in LLL engagement as the organization has a clear understanding on the importance of LLL towards the employees and also itself as well. Through the support from the organization, a higher number of skilled employees who could contribute very well to the organization will be produced. The efficiency, effectiveness, performance and the profits of the organization will then be enhanced and improved. It is a result of having employees who have been equipped with updated and adequate knowledge, skills, abilities and competencies.

1.7.3 Computer Technicians

The computer technicians in the organization will be more likely to engage in LLL in more effective ways to improve their respective knowledge, skills and abilities after having a thorough understanding on the importance of LLL and also the constraints that may be faced by them when they engage in LLL. They could also be supported by their organization or employer in engaging in LLL and obtaining proper and sufficient training opportunities that match their needs and are in line with the organizational goals.

1.8 Definition of Terms

The key terms such as LLL and computer technicians are defined conceptually and operationally below.

1.8.1 Lifelong Learning (LLL)

Conceptual Definition: In Malaysian context, LLL is defined as "learning engaged by everyone of age 15 to 64 and above except professional students" (Ministry of Higher Education Malaysia, 2011). The European Commission defines LLL as "all learning activity undertaken throughout life, with the aim of improving knowledge,
skills and competence, within a personal, civic, social and/or employment related perspective” (Commission of the European Communities, 2001).

**Operational Definition:** In this study, LLL refers to the learning engaged by computer technicians aged 24 and above who are working in a public university.

### 1.8.2 Computer Technician

**Conceptual Definition:** A person whose job is keeping software and hardware in good condition (Oxford Advanced Learner’s Dictionary, 2010).

**Operational Definition:** A person who comes from information technology (IT) field and continuously updates his knowledge, skills and abilities by engaging in LLL.

### 1.9 Conclusion

This chapter has discussed the background and problem statement of the study. Besides, the research objectives and research questions have been explained. In addition, this chapter has clarified the research framework, significance of the study as well as the definition of terms. Next chapter will discuss the literature review of the study.
CHAPTER 2
LITERATURE REVIEW

2.1 Introduction

This chapter discusses the concepts, theories, key researchers and also previous studies conducted by other researchers that are related to lifelong learning (LLL).

2.2 Concept

According to Kok (2014), the concept of LLL was initiated by UNESCO in 1965 to promote the extension of the education process throughout life. Chitiba (2012) stated that, LLL carries the meaning of the continuous improvement and development of the knowledge and skills needed for employment and personal fulfillment by means of formal and informal learning and the activities take place at all times and in all places. LLL is also defined as learning that is pursued throughout life and this process is based on four pillars of education namely, learning to know, learning to do, learning to live together, and with others, and learning to be.

Besides, LLL is about an acquisition or update of individuals’ knowledge, qualifications, abilities and interests from their pre-school years to their post-retirement for enabling each of them to adapt to the knowledge-based economy and participate in their respective social and economic lives actively. Through engaging in LLL, the citizens will have more control of their own future (European Society of Association Executives, n.d.). It emphasizes that education and learning are related to human life as a whole where learning is a continuous lifelong process that begins from cradle and ends at grave or from early childhood through adulthood (ELLI - Development Team, 2008). It is not necessary to be linked to work and formal qualifications’ achievement (AGE - the European Older People’s Platform, 2007).
Apart from that, LLL values many forms or types of learning such as formal learning, non-formal learning and informal learning (Idris' study as cited in Singh, n.d.; European Society of Association Executives, n.d.). It shares mixed connotations with the concepts of education such as adult education, training, continuing education and permanent education. However, LLL is more than those educational concepts because it is or should be treated as a habit or a mindset for people to acquire throughout their life (Fischer, 1999).

2.3 Theory

The theories used in this study are Adult Learning (Andragogy) and Social Learning Theory.

2.3.1 Adult Learning (Andragogy)

According to Dunn (1995), the theorist who introduced the adult learning (andragogy) was Malcolm Knowles. He stated that when people behave like an adult and believe that they are adults, it is possible that they have arrived at adulthood. At this time, they should be treated as adults especially in their learning which is adult learning. This type of learning provides many experience to the learning environment.

The adult learners also expect themselves to be able to have influence on what and how they are to be educated for and on the evaluation of the learning. Hence, they are encouraged in designing and implementing educational programs and applying for new learning. Along the process, they hope that their feedbacks will be considered and acted upon (Dunn, 1995).

2.3.2 Social Learning Theory

The leading proponent of Social Learning Theory among others is Albert Bandura. The learning that occurs within a social context is emphasized by this theory. The theory states that people learn from one another. Observational learning, imitation, and modeling are some of the concepts that are included in the theory (Kytle & Bandura, 1978).
There are several general principles of social learning theory. First, learning of individuals occurs through the observation of others' behaviours and the outcomes of those behaviours. Second, learning can happen without a change in people's behaviour as learning may not necessarily be shown in their performance. Next, cognition plays an important role in learning. Lastly, reinforcements or punishments that people expect can have a major effect on the behaviours they exhibit (Kytle & Bandura, 1978).

According to Kytle and Bandura (1978), some educational implications of social learning theory are as the following:

1. Students learn much by observing others.
2. Description of the consequences for example rewards can increase appropriate behaviors and decrease inappropriate ones effectively.
3. Modeling is an alternative to shaping for teaching new behaviors. It provides a more efficient and faster means for teaching new behavior with the existence of the four essential conditions namely, attention, retention, motor reproduction, and motivation.
4. Teachers and parents must model appropriate behaviors but not inappropriate behaviors.
5. Teachers should expose students to other models in order to break down traditional stereotypes.
6. Students must have a sense of self-efficacy and believe that they are capable of accomplishing school tasks by first having received the confidence-building messages such as watching others be successful, and experiencing success on their own.
7. Teachers should help students set realistic expectations for academic accomplishments.
8. Self-regulation techniques are effective for improving behavior.

2.4 Previous Studies- Key Researchers or Key Studies

A computer search was made of EBSCOhost Research Databases from 1968 to 2015, in which there were slightly more than 256,797 entries on LLL and universities or colleges but only 11 were found on Malaysian universities or colleges.

Although research on LLL are abundant, most of the studies look into the application or implementation of LLL in European countries (e.g. AGE - the European
Older People's Platform, 2007; Commission of the European Communities, 2001; ELLI Development Team, 2008; European Commission, 2007; European Society of Association Executives, n.d.; European University Association, 2008; UNESCO Institute for Education, 2002) and work on LLL in workplace continues to lag some way behind particularly in public sector. Hence, this literature review focuses on LLL in a public university by looking at two key studies.

The first group of key researchers for this research is Mohamad, Hassan, Silong, Raya and Laut in their research "Practices of LLL in a Local Government Authority". In their study, they focused on practices of LLL in the workplace in the Malaysian context and discussed the concepts, dimensions, problems and gaps regarding LLL. They also covered discussions on definitions of LLL and differences between lifelong education and LLL in their research taking into considerations all the perceptions from various researchers in these fields. Besides, they emphasized on practices of LLL as a Human Resource Development function rather than Training and Development. Other concepts such as Learning Organization, Organizational Learning, Adult Education and Self-Directed Learning are also discussed thoroughly in terms of their contributions towards LLL.

They used qualitative research methodology to understand the phenomenon on LLL at the workplace. Purposive sampling technique was used by them to select five top management personnel of a Local Government Authority and the method used for their research was in-depth interview. The findings of their study contain aspects about the understanding of LLL, a culture of learning, policies, programmes, supports, utilization of ICT and barriers to participation in LLL at the workplace. They concluded by proposing an outcome whereby there is a need for open and flexible LLL model at the workplace to overcome the constraints of individuals to engagement in LLL.

Another group of key researchers for this study is Ghebllaw, Goolamally and Ahmad in their research "LLL in Malaysia: Have We Achieved Our Goals?" In their study, they focused on the concepts of LLL and clarified the state of LLL practices in Malaysia and Korea. They compared the practices of LLL in both countries and highlighted many issues on LLL in Malaysia. The discussion was ended with some recommendations which they believed could enhance the enculturation of LLL and make LLL a reality in Malaysia.