

## LIFELONG LEARNING AND QUALITY WORKFORCE: A WAY FORWARD IN RESEARCH AND INNOVATION FOR OUM

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### Abstract

*This paper reviews important elements in the definition of Lifelong Learning and Open and Distance Education as well as the relation between them. In addition, the close relationship between Lifelong Learning and the aspiration to produce Quality Workforce in Malaysia is also reviewed in this paper. The deliberations lead to the importance of research and innovation in understanding the changing need in defining quality of workforce, much like the changing notion of Lifelong Learning and Open and Distance Learning. This realisation can help Open and Distance Learning institutions to identify critical focus area in research and innovation. This deliberation concludes the paper in the form of Way Forward for OUM Research and Innovation initiatives.*

**Keywords:** *Lifelong Learning, Open and Distance Learning, Quality Workforce, Research and Innovation*

### Introduction

Developing Quality Workforce and Building the Knowledge Base and Infrastructure were identified as part of strategic reform initiatives outlined in the New Economic Model (NEM). The model was developed as a catalyst to enable transformation towards realising Vision 2020. The goal of the NEM is for Malaysia to be a developed and competitive economy whose people enjoy a high quality of life and a high level of income resulting from growth that is both inclusive and sustainable (NEAC, 2009). The model includes the formulation of the 10<sup>th</sup> Malaysia Plan 2011-2015. Raising the Capacity of Knowledge and Innovation is one of the key focuses in the plan. 'The foundation of any productive high-income economy lies in a globally competitive, creative and innovative workforce' (EPU, 2010). What we define as Quality Workforce can only be created through an effective and efficient plan across the entire human resource cycle: Early Childhood, School Education, Tertiary Education and Lifelong Learning (LLL). There is a pertinent need for an effective and efficient human resource development system. The importance of LLL in the development of human resource in Malaysia is highlighted by Bahroom and Abdol Latif (2014) who also described the Blueprint on Enculturation of Lifelong Learning in Malaysia: 2011-2020 by MOE. This paper provides the deliberation on the relation between LLL and Quality Workforce.

### Lifelong Learning

'Lifelong is all **learning activities** undertaken throughout life with the aim of improving knowledge, skills and competence within a personal civic, social and/or employment-related perspective' (ESAE, 2007 (as cited in MOE, 2011)). As highlighted in the blueprint, there are several definitions, however the basic elements of LLL ideals are:

- Belief in the idea of lifetime human potential and the possibility of its realisation;
- Efforts to facilitate achievements of skill, knowledge and aptitudes necessary for a successful life;

- Recognition that learning takes place in many modes and places, including formal educational institutions and non-formal experiences such as employment, civic participation and self-initiated activity; and
- The need to provide integrated supportive systems adapted to individual differences that facilitate individuals to achieve mastery and self-direction.

Human potential refers to the inherent capacity in a human for growth and development that can be nurtured. It is necessary for individuals as well for organisations to identify it for the well-being of the society at large. An effective support system can be created for the realisation of this capacity in all human being. This indeed, is the most fundamental support system that must be created in an education institution for learners to acquire self-actualisation in learning and further exploration in other aspects of life including career.

Specific facilities and infrastructures must be built in order for all individuals from all walks of life to acquire skills, knowledge and aptitudes necessary for life. Early Childhood, School Systems and Tertiary Education can provide such facilities to a large population in Malaysia. However, there a significantly large number of people (if not all people), for various different reasons, who require the opportunities that formal, non-formal and informal education that LLL could provide (Dib, 1988).

The third ideal is equally important. For without this recognition ‘true’ learning will not occur and the aim of education will not be realised. Developments in cognitive and brain science indicate that the learning process in human begins since birth without any formal system or language development. The discovery of different modes of learning and various learning theories suggest that learning is a cognitive process that can be nurtured not only by a formal education system, but also through and an awareness of the surrounding and exploration (Advameg, Inc., 2014).

The above recognition of multiple modes of learning is based on individual differences and therefore the need for an integrated education system featuring flexibility and diversity is necessary in LLL.

### **LLL and Open and Distance Learning**

Today LLL is almost synonym with Open and Distance Learning (ODL). What does ODL stands for? The term LLL has more than one definition (COL and ADB, 1999). Despite the common characteristics between the various definitions of ODL, it can be interpreted differently by different organisations. We can start by saying that ODL has a broad definition of learning. It is used in relation to the following terms: correspondence education, continuing education, distance learning, adult education, technology-mediated education, online learning, learner-centred education, open learning, open access, flexible learning, distributed learning and more. What is clearly evident is that, ODL:

- **Connects** learners and teachers who are separated by both space and time;
- Learner-teacher relationship is based on a **two-way communication**, with emphasis on learner-centred education;
- **Supports diversity** among learners by providing material in various formats (multimedia courseware, other visual and/or audio formats) and optional learning environment (online and/or face-to-face interactions);
- **Open system** with **flexibility** in terms of entry requirements and credit transfer via recognition of prior learning (RPL) as well as other variation from the conventional entry and exit regulations; and
- Characteristics such as **e-learning, institution accreditation, use of industrialised processes** and others.

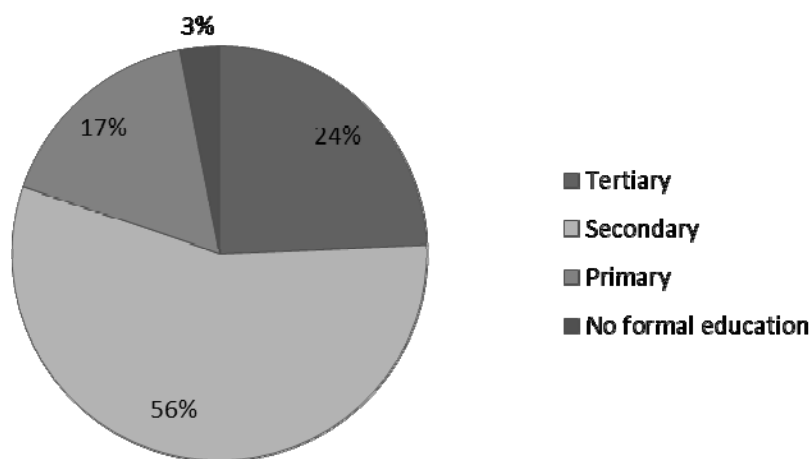
The nature of ODL institutions as described by the above characteristics clearly indicates its suitability to the LLL ideals. Thus, ODL institutions are seen as a preferred choice for LLL for most adults. This close link also means that ODL providers have a major role in LLL and the development of nations such as Malaysia.

In addition to the above characteristics, recent advancements in ODL include Mobile Learning, Open Educational Resources (OER) and Massive Open Online Course (MOOC). Such advancement in ODL is often influenced by the emergence of new technologies in ICT and Multimedia; as well as the changing scenes in Human Resource Development (HRD). The interest in professional development of employees is in line with the current cultural trend that shifts the focus to emphasize the human resource development of the individual (Yamamoto, 2010).

The interest in continual development or education has always been a crucial part of HRD. On-the-job Training or OJT is a learning process whereby a person learns a job by actually doing it (Dessler, 2013). Other learning processes in an organisation is specialised training and formal learning. Although education or formal learning occurs before a person joins an organisation, many organisations support formal continual education as part of a strategy to foster employee relations. In this aspect, ODL institutions is a good solution for both the employee and the employer (both private and governmental organisations). In order for the national aspiration on LLL to materialise, a good working relationship between government, private sectors and ODL providers must exist. As such, government and private sectors as well as the individual learners are identified as important stakeholders in a private ODL institution such as OUM. The following description on the workforce in Malaysia will give a clear picture on the actual need for formal continual education in Malaysia.

### Workforce in Malaysia

The workforce in Malaysia is made of less than 50% of its population. The figures discussed here are based on the 2012 figures from the Department of Statistics, Malaysia. The workforce is supported by foreign workforce (35.2% of the total workforce). Despite this dependence on foreign workforce, there is an unemployment rate of 3.0%. The available workforce (including the unemployed population) education demography is depicted in the following chart.



**Figure 1:** Distribution of the Level of Education of the Workforce in Malaysia (2012)

Figure 1 indicates that more than 50% of the workforce population require tertiary education. The current state of the workforce would certainly pose a challenge to the nation’s aspiration to achieve high income of at least USD 15,000 by 2020 (MOE, 2011). This indicates a crucial need for LLL and ODL institutions’ support. The target population for LLL support through ODL institutions focuses on the entire workforce without any age boundaries. A small group of adults outside the workforce could also be found embarking on LLL.

Ideally, the objective is to develop Quality Workforce. What is Quality Workforce? Quality is defined by the requirements or criteria on how something is measured against other similar things. In the context of Quality Workforce, the requirements must be industry-relevant. These requirements may change with time. For example, the top workplace trends for 2013 and beyond highlighted by the Society for Human Resource

Management (2013) indicates a shortage of skilled workers in the U.S.A. Another important finding is the lack of science, technology, engineering and mathematics (STEM) graduates in the U.S.A. These trends may or may not be similar to the trends in Malaysia. In addition, such trends are also time dependent. This highlights the importance of studies on HRD trend on the development of LLL and education at large. Therefore, ODL institutions must be supported by research in HRD Trends, Market Analysis and other associated research areas. Research and innovation activities ought to be a priority in an ODL institution.

The strength of an ODL institution also lies in its ability to build the appropriate knowledge base that supports the industry-relevant requirements, LLL skills in a learning environment that promotes self-motivation and self-directed learning. These needs are deliberated and supported through the strategies outlined in the Blueprint such as the initiative to set up a National LLL Committee (NLC) under the Education and Training Advisory Council. NLC is responsible for the formulation of LLL standards, policies, practices and guidelines on financing, programmes and research and development. The aim of the policy is to create a knowledge society which embraces LLL as a culture that contributes towards high-income productivity-led economy, inclusiveness and sustainability, while appreciating our national culture and heritage, as well as ensuring personal development and sense of self-worth (MOE, 2011). The action plans and targets are also stated in the blueprint.

### **Open University Malaysia (OUM)**

Open University Malaysia (OUM) is the pioneer ODL provider and the 7<sup>th</sup> private university in Malaysia with more than a decade experience as a LLL provider. It is owned by Multimedia Technology Enhancement Operations Sdn Bhd (METEOR), a consortium of 11 public universities. Programmes are offered in six different areas, by OUM Business School, Faculty of Education and Languages, Faculty of Science and Technology, Faculty of Information Technology, Multimedia and Computer, Faculty of Applied Social Sciences and Faculty of Nursing and Applied Health Sciences. These faculties are responsible for all key processes related to provision of Quality Education. The programmes offered range from diploma to PhD programmes. All programmes offered by OUM are evaluated and approved by the Malaysian Qualification Agency (MQA). Executive programmes are offered by the Institute of Professional Development (IPD).

OUM is also the largest ODL institution in the country with a total of 53,177 graduates (end of 2013). It is supported by 21 learning centres (LCs) in all major cities in the country and the Tan Sri Dr Abdullah Sanusi Digital Library (ISO Certified). The mission of the university is to democratise education by widening access to quality education and provide LLL opportunities by leveraging on technology, adopting flexible mode of learning, and providing a conducive and engaging learning environment at competitive and affordable cost.

OUM offers:

1. Flexible Entry: a flexible entry requirement that offers an alternative pathway for individual by recognising the learning process that occur through work experience. Interested applicants undergo an assessment process that is recognised by MQA.
2. Prior learning is also recognised through APEL (Accreditation of Prior Experiential Learning) programme, where learners may apply for credit transfer for selected courses. Prior learning are recognised based on specific work experience that enable the achievement of learning outcomes stated under the selected course.
3. Flexible Learning Options offered through the introduction of several modes of learning (blended-mode of learning):
  - (a) Self-instructional materials (also referred to as modules) and support materials. In OUM, these materials are developed by the Centre of Instructional Design and Technology (CIDT) that is responsible for supporting all faculties by providing learning materials and support material using instructional technology that engage learners and promotes self-managed learning. The university also provides OER material for learners.

- (b) Online Forum, Face-to-face Tutorials and Mobile Learning offered as additional Teaching and Learning (T&L) choices by OUM. These choices are offered in addition to the T&L instructional design strategies that are incorporated into the learning materials produced by OUM. The Institute of Teaching and Learning Advancement (ITLA) is largely responsible for ensuring the quality of these additional T&L options.
4. Assessment at OUM includes continuous assessment component in the form of assignments that encourage learners to relate their learning experience to their work experience. There are limitations in such efforts. OUM continues to explore and integrate various options including industry-related case studies. Research in this area is important.
  5. The ODL system in OUM is supported through an e-learning platform known as My Virtual Learning Environment or myVLE. The support systems has undergone a few cycles of improvements. Research must be carried-on e-learning standards and system improvements in order to the most effective system that serves the learning requirements of OUM learners.
  6. Learners at OUM are also supported by the Centre of Student Management (CSM). The centre manages complains from learners using an electronic system known as Electronic Customer Relationship Management (ECRM) System. CSM also provide student-centred support services such as counselling with the support from all LCs.
  7. Academicians at OUM are encouraged to conduct research. At present, research is encouraged in ODL, Content Development, T&L, Assessment and other important areas in ODL. These efforts are supported and funded by Internal Research Grants. All research activities (funded (by internal and external funds) and non-funded) are managed by the Institute of Quality, Research and Innovation (IQRI). IQRI is also responsible for managing Institutional Research, Collaborative Research and Strategic Research at OUM. In addition, OUM's Quality Management System is also managed by IQRI through scheduled internal audits with the support from trained internal auditors. The audit helps the organisation to identify issues, risk factors and improvements through Strategic Research efforts. At present OUM is involved in Collaborative Research efforts with five other regional ODL institutions. Institutional Research such as the Employer Satisfaction survey has been carried by CSM to support OUM's mission to provide Quality Education Services.
  8. As a private and a LLL institution, all programmes offered by OUM must be industry-relevant. As such efforts such as market need analysis, involvement of external experts (from industries. other academic institutions and/or government sectors) through Board of Studies and consultancies are a part of the programme development process at OUM. In addition, OUM gain industry-relevant requirements through IPD's vast experience in developing specialised programmes for the industry sector.

The education and education support processes described above receive business support from various other departments such as Finance and Corporate Planning, Group ICT Services (GICTS), Group Human Resource Management and others. This review also leads to the question, 'What's next?' The final section outlines the way forward for in Quality Management and Research efforts at OUM.

### **Way Forward for Research and Innovation at OUM**

OUM is interested in pursuing the national agenda on LLL as well as to establish itself as the leading ODL provider in the region. This aim has been pursued through the various strategies as evident in the above section. Nevertheless, there is always room for improvement. The following are some of the strategies to be considered for 2015.

- Collaborative efforts among LLL agencies and providers as strategic effort for realisation of the national agenda on LLL and sharing resources.

- Increase research efforts through strategic initiatives. The plan includes new research focus. The area of research at OUM is divided into: Academic, Institutional, Collaborative and Strategic. Each focus area requires a strategic plan with its efforts well-supported by the management.
- Quality Education ought to be the main focus of university with research efforts and quality management efforts targeted at all main academic processes: programme development, material development, T&L practices, assessment and research and innovation.
  - The Quality of Programmes (new and existing) can be improved further with supports from active research in market analysis, curriculum designs, HRD trend and other relevant areas. Research should also be directed at studying and improving the extent of flexibility and open-learning.
  - Content delivery in ODL institutions such as OUM is unique in the sense that self-instruction materials consist of content as well T&L strategies that encourage learners to explore. As such, there must be greater emphasis on Design and Pedagogical Framework in content development. The extent of the desired outcomes (knowledge, exploration, ability to support diverse learners and other) must be measured and research efforts must be in place to support new development in the area.
  - The use of material is supported by creating a **connection** between learners and teachers through Online Forum. Efforts can be emphasised to improve this support by research in areas such Communication (Two-Way), Collaborative Learning and e-Learning.
  - Extensive research efforts could also be pursued in the area of Assessment Method for ODL to ensure effective measurement of the desired learning outcome. The task for OUM is great as the measurement of learning outcome must integrate the Malaysia Qualification Framework and the industrial requirement.
  - Increase research activities in OUM through strategic initiatives. This effort is supported by the management through increase of research fund for the coming year. There is a need to identify important focus areas of research in ODL in order to developed detailed initiatives to support all research activities aimed at improvement of the quality of education.
- Provide additional support and improve current research in education support services at OUM in order to provide Quality Education Support Services to all OUM learners. These services ought to provide the support that the learners require in facing the challenges as adult learners. Research in this area can be divided into Quality of OUM Education Support Services as well as Situational and Dispositional Barriers among ODL Learners.
- Additional support and improvement is also needed in the study on the Quality of OUM Graduates. At present there is on-going research on Employer Satisfaction by CSM and there is a discussion to improve the effort further through collaboration. There is a need to incorporate research on HRD Trend to improve the quality of graduates further.
- Improve Quality Management System by establishing research in designing an integrated system to ensure and support quality education and quality education services as well as other efforts such as institution accreditation efforts and the use of industrialised processes to support the large student mass.

The above some of the deliberation outlined based on the characteristics and functions of OUM as a LLL and ODL provider. Further actions must be taken to explore and implement these initiatives.

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