# eLearning in Higher Education Institutions in Malaysia

Raja Maznah Raja Hussain Department of Curriculum and Instructional Technology Faculty of Education University of Malaya Kuala Lumpur

#### Abstract

Many academic institutions in Malaysia commit themselves to eLearning because they believe in its effectiveness as an alternative approach to the traditional classroom method of disseminating information. Preparing and managing eLearning is a complex process it requires a shift from change management to strategic planning. This paper will present the findings of a project undertaken to study strategic planning and implementation of eLearning in several Higher Education Institutions (HEI) in Malaysia. The method is based on Roger Kaufmann's (1992) strategic planning model to assess the gaps between the current and the desired results.

#### Introduction

Information Communication Technology (ICT) has a central role in maintaining the quality of higher education in Malaysia and it will be a basis for competitive advantage of the universities. In Malaysia, the IT agenda was initially driven by technological and scientific forces and innovations as well as the supply and demand and marketing forces and entrepreneurship (Bajunid, 2002). Formal and informal education programs are being offered using the eLearning mode. As an example, two of the country's universities, University Tun Abdul Razak (Unitar) and Open University Malaysia (OUM) are currently offering all degree programmes via the hybrid and blended mode, respectively. Each incorporates the use of eLearning. In addition, a growing number of public and private universities throughout the nation are employing eLearning methodologies either to offer academic programmes via distance or to support their full-time on-campus learners (OUM, 2004).

Currently, there are 11 public universities, 4 university colleges, 18 private universities and over 600 private colleges in the country. With the increase in the demand for higher education, many institutions in Malaysia have planned for eLearning. Universities in Malaysia have responded actively to this challenge while guided by the Ministry of Education's strategies to enhance the use of ICT in the eLearning as follows (Hassan, 2002):

1. The preparation of sufficient and up-to-date tested ICT infrastructure and equipment to all educational institutions.

- 2. The roll-out of ICT curriculum and assessment, and the emphasis of integration of ICT in teaching and learning.
- 3. The upgrading of ICT knowledge and skills in students and teachers.
- 4. Increased usage of ICT in educational management.
- 5. The upgrading of the maintenance and management of ICT equipment in all educational institutions.

This paper will report the findings of a recent study undertaken to look into the planning and implementation of eLearning in some HEIs in the country. The study was carried out as a graduate level project on strategic planning by students in the Masters of Instructional Technology Program. The study was conducted via visits to the institutions, discussions with the person(s) responsible for eLearning, document analysis and viewing of the institutions' websites and learning management systems (LMS). The report will focus on the current situation taking into consideration the gaps which will be the basis for future improvement. The product of the project was a strategic plan for eLearning for each institution involved in the project, which is not the intention of this paper. The project was guided by the Organization Element Model (Kaufman, 1992) and IHEP benchmarks (2000).

## Sufficient infrastructure

The concept of eLearning, as seen by the Ministry of Education (MOE), includes systems that enable information gathering, management, access and communication in various forms (Hassan, 2002). Thus, the first phase of eLearning project for most HEIs is the acquisition of sufficient ICT infrastructure to enable them to offer an excellent eLearning platform to students. Upgrading of ICT infrastructure was seen as an urgent matter in the last 4 years. Millions of Ringgit are spent to provide the IT infrastructure and to develop eLearning delivery and management systems in HEIs. Most HEIs now have sufficient computer labs and are wired with broadband internet access and some with wireless mobile computing capabilities. Lecturers are provided with at least a Pentium 4 desktop if not a laptop with mobile computing capability. The infrastructure for eLearning has become one of the attractions used by HEIs to compete in attracting students to enrol in their programs.

## ICT in teaching and learning

The second phase of eLearning development in Malaysia is the integration of ICT in teaching and learning. In a study of eLearning implementation in several HEIs in Singapore and Malaysia, the following common elements were observed to be the critical success factors (Raja Maznah, 2000b):

- The institution's strategic plan for ICT use in teaching and learning.
- The specialized center that translates the plans into reality and coordinates the strategies for eLearning success.
- The right combination of human resources balancing the academic know how

with technology savvy.

- Sufficient infrastructure to enable the eLearning platform.
- Staff development plans and strategies to encourage the adoption of IT for teaching and learning.

Most public universities in Malaysia have some form of strategic plan as far back as the year 2000 for e-university (which may include, eLearning, online learning, or webbased learning) either through the development of specific responsibility center and or specific plan related to eLearning (Raja Maznah, 2002). However, an examination of the current status of planning for eLearning has found that most institutions have yet to draw a strategic plan specifically for use of ICT in teaching and learning as per IHEP (2000).

HEIs in Malaysia are still at an infancy stage in the planning and implementing of eLearning when compared to the quality benchmarks compiled by IHEP in 2000. These include institutional support, course development, teaching/learning, course structure, student support, faculty support, evaluation and assessment. A SWOT analysis using the benchmark and the Kaufman's Organizational Elements Model (OEM) was conducted recently in six higher education institutions earlier this year (2004). It was found that most HEIs have sufficient eLearning infrastructure. However, the following weaknesses found in the HEIs in the study are related to the planning and implementation of the teaching/learning component of eLearning:

a. A lack of a strategic plan for eLearning.

Most HEIs in the study have documents to show the ICT planning, which are mainly related to acquisition of ICT infrastructure. However, planning of ICT for teaching and learning, course development, course structure and assessment is yet to be firmed. Some of the plans are still in the mind of the person(s) responsible for managing the eLearning. Planning (even the policy) for use of ICT in teaching and learning seems to be still on the drawing boards, the plans that I have seen included the decisions on what percentage of the course should be delivered online or what trainings the lecturers should go through in order to convert the content for online delivery online and the training for use of the purchased or home grown LMS.

b. eLearning is sporadic.

In the organizations that I have studied the decision to use eLearning is made by the management, mainly because everyone else is doing it. It is believed that in order to compete the HEI has to offer eLearning as an alternative or as an add-on to their present face-to-face delivery mode. Since the infrastructure and the learning management systems (LMS) are readily available the more ready for the HEI to embark on eLearning.

Several approaches were observed of how HEIs went about doing eLearning. eLearning is still driven by the IT industry. Initially in some HEIs (the early adopters), the approach was to convert the face-to-face lecture materials to digital content, where the lecturers suddenly found themselves forced to be involved in the writing of lecture notes to be digitized for online access without the help of experienced instructional designers. Most of the materials that were posted were not pedagogically sound. They were merely information which can be considered as content. The institutions were quick to realize that eLearning is about students learning. Instructional designers (ID) were then brought into the picture about 3 years ago. Instructional Design for eLearning, as a field is still new in the country. The IDs were hired to train the content developers on the importance of designing instructions to help learners learn. The Multimedia University (MMU) in the year 2000 formed an ID team to be the bridge between the content experts and the IT experts while developing an in house LMS (Raja Maznah, 2002). MMU has now established a dedicated center to take care of the internet based programs. Similarly, the Open University Malaysia (OUM), when it was established in year 2001, started with plans for eLearning and a special outfit the Center for Instructional Design and Technology was established, to enable the development of both digital and print based contents. Similarly, the country's first Virtual University (UNITAR) when it was established in 1996, also set up a content development department to develop the digital contents.

c. eLearning leadership is new

Although, Malaysia has a Virtual University, a Multimedia University, and an Open University, best practice is yet to be established by these HEIs leading the eLearning. In the last Asia Cooperation Dialogue: Workshop on e-Education, in Kuala Lumpur (April, 2004) the need for a regional eLearning body was discussed. This body would play the role of the leader in eLearning research, drawing up guidelines (or standards) for accreditation of eLearning programs, and strategies for eLearning implementation in the region. Accreditation of the eLearning program is a hot issue which was debated at lengths. Although the interest in eLearning especially in the informal education is prevalent, however, the public is still unsure of the worth of the certificate obtained through eLearning. A study headed by OUM is currently looking into the eLearning readiness in Malaysia, from the perspectives of policy makers, content providers, enablers, eLearning vendors, and consumers. It is expected that the findings of the study will help identify the readiness factors and suggest policy guidelines to address the gaps where found (OUM, 2004).

The problem of communication also found to exist at the organization level, whereby strategic intention of the senior management is not made clear to the eLearning project members. In most cases eLearning responsibility is given to the IT experts who are responsible to set up the infrastructure and to purchase or build an LMS. Education experts are often not consulted at the initial decision making stage. Thus, the approach to eLearning tends to be technocentric. This is still happening in many HEIs where the person in charge of eLearning is an IT expert, not an Instructional Technologist. But that practice is being changed where Instructional Technologists are now involved in the decision making, either as an instructional designer or a trainer in the eLearning projects or heading a center for eLearning development.

d. Insufficient funding to carry out a full blown project.

Some institutions have invested substantially on eLearning of which the result is yet to be seen. The investment is in the infrastructure and the purchase or development of the LMS. While other institutions have to work with a limited budget allocated for the development of teaching and learning materials, outsourcing of eLearning content development and training of lecturers to use eLearning.

e. Lack of skills and experience among faculty members to use eLearning.

Outsourcing eLearning content development can be very expensive. In most HEIs training and supports are usually provided in house for the lecturers to develop the content and to use the new eLearning facilities. Involvements of academic staff in the development of eLearning vary from one institution to another. Developing courses by lecturers for on-line delivery is still an option in most institutions. Lecturers are often reluctant to embark on the development project themselves, due to time constraints and lack of expertise in courseware authoring (Raja Maznah, 2000a). eLearning content development in most HEIs institutions is a duty required over and above other regular duties to be carried out by the lecturers often with technical supports provided by the institutions. The technical support may come from specialized centers hire IT experts, Instructional Designers, Web specialists and graphic and visual artists.

#### Conclusion

This paper has examined the trend in the implementation of eLearning in HEIs in Malaysia. The paper has outlined some of the eLearning problems faced by HEIs in Malaysia and examined how institutions provide support through ICT plans and strategies, specialized center, infrastructure and staff development provision. eLearning is here to stay, and quality eLearning requires teamwork at all levels in the organization and individuals involved, thus providing quality eLearning is the responsibility of the whole organization and the society.

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**Dr. Raja Maznah Raja Hussain** is an Associate Professor and the former Head of Department in the Department of Curriculum and Instructional Technology, at the Faculty of Education, University of Malaya. She was the Director of UMLIC (University of Malaya Learning Development Center) from 1996 – 2000.

Dr. Raja Maznah has a Ph. D. in the field of Instructional Systems Technology from Indiana University. Her area of specialization is Instructional Design and Training. She has presented papers and conducted workshops for Higher Education Institutions and organizations in the areas of Instructional Design, Course Development, Presentation Skills, Management of Technology-Based Learning, and Learning Organization.

She was a Visiting Professor at the Florida State University in 1995 in the School Year 2000 project, a project to restructure schools using technology. She spent her sabbatical in 2000 at the Multimedia University as a Visiting Professor responsible for developing Instructional Design Guideline for the Multimedia Learning System (MMLS). She was an Instructional Designer Consultant to UNITEM in the Content Development project in 2001-2002. She is a lead researcher and Instructional Designer for INSTEP in their eLearning project since 2001.