Chapter 7

E-LEARNING STRATEGIES IN MALAYSIAN HIGHER EDUCATION INSTITUTIONS

Raja Maznah Raja Hussain and Abdul Halim Sulaiman
University of Malaya

Abstract

In August 2007, the Ministry of Higher Education Malaysia (MOHE) launched The National Higher Education Strategic Plan with the intention to trigger higher education transformations. The plan outlines seven strategic thrusts that form the basis of national higher education development through 2020, one of which is to improve the quality of teaching and learning. Having committed to the plan, e-learning has been identified as one of the Critical Agenda Projects (CAPs) and a National Key Result Area (NKRA) of MOHE. This chapter will present some of the strategies to enhance the use of e-learning implemented by public higher education institutions (HEIs) in Malaysia. These strategies would include the e-learning policy, leadership and governance, infrastructure, staff development provisions and reward structure. This chapter will also examine the roles of the Public Universities e-learning Consortium in enabling the HEIs to work together and collaborate in making e-learning a success.
INTRODUCTION

Malaysia like many countries in the world is concerned about strengthening its higher education system. Malaysia has invested heavily in its educational plan. As of 2007 the higher education capacity has grown from the formation of the country’s first university, University of Malaya in 1961, to the 2007 enrolment of 9,422,002 students in 20 public universities, 32 private universities and university colleges, four branch campuses of international universities, 21 polytechnics, 37 public community colleges, and 485 private colleges (National Higher Education Plan, 2007-2010, p.11). There is an urgency to transform higher education in order to meet the needs of the growing population and the need to compete globally. The change will require successful translation of long-range National Higher Education Strategic Plan into closely coordinated actions. The future economic, social, and spiritual well-being of the nation depends critically on the success of this transformation (National Higher Education Plan, 2007-2010). The plan was launched in August 2007 by the Ministry of Higher Education (MOHE). The former Prime Minister, in the forward has lamented that:

The success of our human capital development agenda rests in large part on the quality of the national education system. Therefore, the Government aims to spearhead an effort to transform the national education system at all levels, from pre-school through higher education (National Higher Education Plan, 2007-2010, p.7).

The plan outlines seven strategic thrusts that form the basis of national higher education development through 2020. The seven strategic thrusts of higher education as outlined in the report are:

1. Widening access and enhancing equity
2. Improving the quality of teaching and learning
3. Enhancing research and innovation
4. Strengthening Institutions of Higher Education
5. Intensifying internationalisation
6. Enculturation of lifelong learning
7. Reinforcing the Higher Education Ministry’s delivery system

The seven strategic thrusts may be enhanced through the use of Information and Communication Technology (ICT). As a country Malaysia has invested heavily in the resources and infrastructure in order to incorporate ICT in the educational and administrative processes. Universities are being
equipped with the latest ICT infrastructure and staff are being trained to use ICT for education and administrative purposes. Although teachers of higher education have been introduced to the ICT tools and its pedagogy to help them support their students learning, we have yet to see ICT been fully embraced by the teachers.

This chapter is concerned with strategies taken by higher education institutions (HEIs) to improve the quality of teaching and learning through the use of e-learning. Therefore an examination of how the higher education institutions implement e-learning is deemed necessary. The examination will require a look at the e-learning policy, leadership and governance, infrastructure, staff development provisions and reward structure in relation to e-learning in higher education. This chapter will limit its discussion to e-learning in public higher education institutions and will also examine the roles of the Council of the Malaysian Public HEIs e-Learning Coordinators (MEIPTA) in enabling the HEIs to work together and collaborate in making e-learning a success. Where appropriate the chapter will use examples from University of Malaya of which the authors are familiar. Both authors are also members of MEIPTA.

**ENHANCING E-LEARNING**

Although Malaysian HEIs have embraced e-learning since the year 2000 the uptake has not been smooth. The move has been hampered by focusing too much on the infrastructure and very little on the student learning that can benefit from the integration of technology into teaching and learning. Focusing on student learning would inspire the transformation of HEIs to achieve the nation’s aspiration to produce wholesome graduates as stated in the National Education Plan: “We must produce confident students with a sense of balance and proportion” (National Higher Education Plan, 2007-2010, p.27).

A sense of balance and proportion may mean different things to different higher education providers. One thing known for sure is that Malaysian graduates must possess soft skills, identified to be the most critical skills in the current global job market especially in a fast pace era of technology (Ministry of Higher Education, Malaysia, 2006). The soft skills are to be developed and polished while the students are at the university. They are: i) Communicative skills, ii) Critical thinking and problem solving skills, iii) Team work skills iv) Life-long learning and information management skills, v) Ethics, moral and
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professional skills, vi) Entrepreneurial skills and vii) Leadership skills (Ministry of Higher Education, Malaysia, 2006).

Today’s digital technologies are revolutionizing the way people communicate and learn, thus with the support of technology for learning the seven soft skills may be easily acquired. However, to effectively use technology to support learning requires teachers to re-examine their pedagogical practices. The need for teachers to change is becoming more urgent as MOHE has also called for a reform in the curriculum delivery:

While the curriculum is important, its delivery is equally critical. HEI academic staff are today expected to be leaders in the field of teaching. While reformed administrative procedures and excellent curricula will aid HEIs in achieving their true potential, teaching staff form the frontline of this transformation and must focus on innovative delivery of curricula. Adoption of innovative modes such as active learning or problem-based learning will be encouraged where appropriate to promote the development of communication, problem-solving, and self-directed learning skills (National Higher Education Plan, 2007-2010, p.28).

The call to reform has major implications for hiring academic talent, developing academic staff and supporting the lecturers in HEIs. Do HEIs then hire academic staff who have a passion for teaching and those who are willing to learn how to teach effectively face to face and online? Should the lecturers be encouraged to experiment with new scholarly forms of authoring, publishing and researching using technology? According to the Horizon report 2011 (Johnson, et al., 2011) reconciling new forms of scholarly activity with old standards continues to be difficult, creating tension and raising questions as to where faculty energy is best directed. The process of empowering lecturers to use technology for teaching and scholarly work takes time. It takes even longer to change the attitude of lecturers to scholarly teaching when teaching is not seen as rewarding as publishing in high-tiered journals. Malaysia is learning from the experience of her first virtual university, established in 1996, now known as University Tun Abdul Razak (UNITAR), in the implementation of e-learning projects especially in the training and support of its lecturers.

A former president of UNITAR has expressed his regrets on the failure of UNITAR to sustain itself as a pioneer virtual university in Malaysia. Upon reflection these are what he would have done differently especially on the training of the right academic staff to make e-learning a success:
It is most important to train the lecturers not only in terms of how to effectively teach in an e-learning environment, but more importantly they should be immersed in the e-learning process and be a true believer of e-learning. This can only be done over time and not instantly as is normally done in the conventional university. It is possible to do it in the conventional university because they are familiar with the whole process, having gone through it themselves, all their lives. From my experience, it is easier to train those who are IT savvy than those who are not (Syed Othman, 2005).

The success of e-learning depends very much on the acceptance of the lecturers and their willingness to make e-learning a culture. Thus immersing the lecturers in the e-learning process is crucial. Research by Kelly (2009) has shown that in order for lecturers to understand e-learning from the learner’s perspective, there is a need for them to process their e-learning experience. Thus it is not surprising that a recent study conducted by the National Defence University Malaysia found that the lecturers fail to appreciate e-learning because their understanding of e-pedagogy is limited (Juwati, 2011) due to a lack of experience in e-learning either in their education or in the training to use e-learning. Having invested heavily on the infrastructure and training of lecturers on e-learning, we realized the urgency to optimize the use of e-learning and to make it sustainable. Therefore, several mechanisms to drive e-learning are being put in place by MOHE which will be described in the following sections.

MECHANISMS TO DRIVE E-LEARNING

MOHE’s CAPap For E-Learning

Under the MOHE’s First Phase of the National Higher Education Strategic Plan (2007-2010), the single target set for the e-learning Critical Agenda Projects (CAPap) requires public institutions to make an e-learning platform available by 2010. Nevertheless the plan has been perceived as a directive to every HEI to get serious about e-learning.

In April 2011, the MOHE launched the National e-Learning Policy which was based on five pillars: infrastructure, organizational structure, curriculum and e-content, professional development and enculturation. Altogether 13 Key Performance Indicator’s (KPI) have been set to be achieved in phases which will end in the year 2015, the targeted year when e-learning is supposed to be fully optimized in Malaysia. The KPI’s include, among other things, having
good Internet connectivity, the incorporation of Web 2.0 tools, training staff in e-learning, proper governance structure and reward system. With the inclusion of the new KPIs, all HEIs have no choice but to chart their e-learning implementation according to the time-line given, although some of them are still trying to decide their e-learning infrastructure and choice of LMS. University of Malaya for example, has started to make it mandatory for all lecturers to use e-learning for at least one of their undergraduate courses.

Council of the Malaysian Public HEIs E-Learning Coordinators

As the success of e-learning KPIs became more critical, HEIs decided to consolidate their efforts and learn from each other. Thus a Council of the Malaysian Public HEIs e-Learning Coordinators (MEIPTA) was formed in the year 2007 as a platform for cooperation in the field of e-learning among Malaysian public universities. The portal is hosted by the University of Malaya (see Figure 1). The council meets at least three times a year. Issues discussed at the council meetings are not only limited to latest development in e-learning, but also include best practices by the respective member institutions such as incentive and reward systems.

Figure 1. MEIPTA’s Portal.
Since its formation, the council members felt that there was a need to develop a generic e-learning policy which could be used as a guideline for all the institutions especially those with yet to have a policy in place. The experience in policy formulation has also put the council in a significant position to contribute to the development of the national e-learning policy. The MOHE has also requested the e-learning council (MEIPTA) to carry out a survey entitled ‘e-Learning in Malaysian Higher Education Institutions: Status, Trends and Challenges’, the results of which are compiled into a book edited by Embi (2011) and presented briefly in the next section.

**E-LEARNING POLICY AND GOVERNANCE**

From the study by Embi (2011) it was found 80% of the sample indicated that an e-learning policy existed in their respective Malaysian Public institutions. However, in terms of compliance with the policy, the data show that 30.6% of academic staff complied with the policy fully, while 58.7% complied with some parts of the policy. Out of the 26 HEIs involved in the study, only 38.5% or 10 HEIs have formulated and adopted the e-learning policies, while the remaining 61.5% or 16 HEIs still do not have any e-learning policies. Therefore, the publication of the National e-Learning Policy is timely as it provides guidance to e-learning implementation in Malaysia.

In terms of e-learning governance, as documented by Embi (2011), only five HEIs (19.2%) did not have a dedicated unit specifically to manage the implementation of e-learning in their respective institutions. Typically, the e-learning governance is placed under the Information Technology Centre (61.5%), followed by the Academic Development Centre (38.5%) and the Centre for Teaching and Learning (34.5%) of the respective institutions. Only seven HEIs (26.9%) had e-learning centre that functions as a formal governance structure for the planning and implementation of e-learning. As proper governance is one of the CAP’s KPIs, every HEI needs to address these issues seriously. In the University of Malaya (UM) the Information Technology Centre hosts and maintains the e-learning servers and the Academic Development Centre (ADeC) provides the pedagogical support and training to the lecturers.
E-Learning Infrastructure

From the same study by Embi (2011) it was found that all the 26 HEIs involved in this study already had a Learning Management System (LMS) with 57.7% on Open Source platforms, and Moodle (Modular Object-Oriented Dynamic Learning Environment) being most popular. However, in terms of Internet connectivity, since some of the HEIs are relatively new, not all had the connection speed stipulated by the MOHE’s KPIs (15-100 MB bandwidth).

The University of Malaya (UM) is one of the earliest HEI to have a platform since 1996 called LearningCare - a proprietary LMS. However, the interest in e-learning was not sustained as the lecturers found that the platform was not as user friendly as Moodle. Moodle was first introduced in 2003 to the UM lecturers involved in a project funded by the Danish Government on environmental management where a platform to exchange teaching materials among the participating universities was needed. The push for the change in e-learning platform was from the bottom up led by the Academic Development Centre (ADeC) when in year 2007 Moodle was introduced as a new e-learning platform to lecturers. For three years, interested lecturers were trained to use it by ADeC. The effort paid off when the Vice Chancellor decided that UM should only have a single Virtual Learning Environment. Moodle was then officially declared as the e-learning platform of choice for UM as of July 2009.

Training and Staff Development

Having secured the e-learning platform the next challenge for HEIs in Malaysia is to ensure that the infrastructure is fully utilized. As most lecturers are unfamiliar with e-teaching, training is often considered as the fastest way to deliver instruction. The study by Embi (2011) found that 84.6% of HEIs surveyed provide e-learning training and staff development programmes. Most HEIs carried out one-day training on average about 3-4 times per year especially during the semester breaks. In most institutions the e-learning training is not compulsory. According to the same author, 42.3% of the surveyed institutions offered more than 50% of their courses online mostly to supplement the face-to-face mode. In UM, every course will be made available online at the beginning of the semester where the information on courses, instructors and students are taken automatically from the university’s database.
Until now, UM has trained many lecturers to use the new e-learning platform, which has been re-branded as SPeCTRUM (Student-Powered e-Collaboration Transforming UM) through ADeC. The purpose of the training is to familiarize lecturers with the tools available in Moodle and to enable them to design the course based on sound e-learning pedagogy. It is crucial that the training will significantly develop their practice of blending technology with face-to-face teaching through the use of student centred approaches that lead to higher achievement for students. The training is designed based on our experience developing PLEaSE (Personalized Learning Environment and Students Engagement) model for training undergraduate teacher trainees (Raja Hussain, 2011). In the model the role of lecturers changed from information providers to facilitators as the students become more engaged and independent. We believe that students should be empowered to develop their own personal learning spaces using tools of their choice. Students are supported in the use of e-learning and/or mobile learning using devices accessible to them, preferably those that they own. We have also developed a guideline to help lecturers learn on their own to design courses based on crucial learning outcomes of their specific courses.

REWARD STRUCTURE

Although the mechanism supporting e-learning is in place there is still a need to motivate the lecturers and faculties to effectively implement e-learning. HEIs in Malaysia are still looking for the best way to reward lecturers who use e-learning. In the last few meetings of the e-learning council (MEIPTA), the issue has been discussed and some universities have shared with the council their reward structure. The rewards ranged from monetary awards to certificates. For example, Universiti Kebangsaan Malaysia (UKM) gives cash to the most active faculty that used the e-learning platform and gives certificates to the most active course and lecturer. The Universiti Malaysia Sabah (UMS) is planning to give cash to the most active lecturers, a research grant for e-learning research and a grant to publish books on e-learning. The Universiti Teknologi Mara (UiTM), gives rewards in cash to lecturers in the completion of storyboard to development of multimedia resources. The University of Malaya, on the other hand, is looking into a reward structure that shall be aligned with the e-learning policy being formulated taking into consideration the national policy and best practices from Malaysia and around the world.
CONCLUSION

The implementation of e-learning has been an uphill battle for HEIs in Malaysia. For more than ten years HEIs in Malaysia have been engaged in providing new learning experience to students through the use of e-learning. Initial efforts were made by individual HEIs to equip themselves with e-learning infrastructure and know-how. However, many HEIs have fallen into the trap of e-learning fad, where e-learning was seen as an effort to provide technology as tools but very little attention was paid to the use of technology to achieve the learning outcomes needed of the 21st century graduates. Realizing the need to have the mechanism for successful implementation of e-learning, MOHE has established the critical agenda projects for e-learning, approved the setting up of a council of e-learning coordinators in public HEIs and launched the national e-learning policy. The mechanism is to drive change and transform the teaching and learning through the use of e-learning in public universities. With the introduction of the critical agenda projects and the policy for e-learning it is hoped that the HEIs will be guided to implement e-learning thus achieving the vision of effective teaching and learning. The challenge for the HEIs in Malaysia is to keep learning and researching on the best way to support student learning especially through the use of technology that students, lecturers and staff carry. The challenge is also to develop curriculum that takes into consideration the rate of change in digital technology and to manage the transformation.

REFERENCES


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