

Distance education public policy and practice in the higher education: The Case of Malaysia.

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ABSTRACT

This paper presents an overview of the current state of use of Distance Education in Malaysian Higher Education. Parts of this paper are based on research performed in support of a project of the Government of South Africa that aims to review and reorganize its policy of regulation and funding of Distance Education in the HE sector. Other parts are based on the experience of the authors in applying DE in their institutions and on published case studies of policy and practices in other institutions in the HE sector. The review covers both the public and the private sector HE institutions as, in the case of Malaysia, this distinction is rapidly losing all meaning as the HE sector proceeds towards self-sustainability and independence of from public funding.

RESUMO

O presente artigo apresenta uma análise geral da atual uso da Educação a Distância no ensino superior da Malásia. Algumas partes deste trabalho são baseadas numa pesquisa realizada para apoiar um projeto do governo da África do Sul, na sua pretensão de rever e reorganizar suas leis de regulamentação e financiamento para a Educação a Distância no ensino superior. Outras partes são baseadas na experiência dos autores no uso da Educação a Distância em suas instituições de trabalho, e em estudos de casos de políticas e práticas em outras instituições de ensino superior. A análise cobre instituições dos setores público e privado no ensino superior, uma vez que na Malásia, tal distinção está rapidamente perdendo sentido porque o ensino superior está caminhando para uma auto-sustentação e independência de financiamento público.

RESUMEN

Lo actual artículo presenta una análisis general del actual uso de la Educación a Distancia en lo enseñanza superior del la Malasia. Algunas partes del trabajo son basadas en pesquisa ejecutada para apoyar un proyecto de gobierno de la Africa del Sur, en su pretencion de rever y reorganizar sus leys de regulamentacion y financiamento para la Educacion a Distancia en lo enseñanza superior. Otras partes son basadas en la experiencia de los autores en lo uso de la Educacion a Distancia en sus instituciones de trabajo, y en estudios de acontecimientos de politicas y praticas en otras instituciones de enseñanza superior. La analise comprende instituciones de los sectores publico y privado en lo enseñanza superior, aunque en Malasia, la distincion esta rapidamente perdendo significación visto que lo enseñanza superior esta caminando para una auto - sustentación y independencia de financiamento publico.

1. Distance Education in Malaysia

1.1. Introduction

Malaysia is a fast developing country and is in the process of industrialization. Hence Malaysia is at a very interesting phase of technology development and expansion. With a market economy, Malaysia has a

good communication infrastructure for distance education in terms of print, radio and television broadcasts, telephone, postal services and telecommunication

In Malaysia, the provision for education is the biggest challenge for the government as the nation strives to become a fully industrialized country by the year 2020. One solution available is to use newer technologies as vehicles to bring a variety of educational opportunities to individuals. Universities are taking up the challenge by changing not only the content of the curriculum and programs but more importantly, the delivery systems. Distance education is fast developing as a major component of provision of higher education in both the public and private sectors.

Distance learning in Malaysia started off with correspondence schools to cater for students who could not gain entry into government funded schools. Institutions like Stanford College, Raffles College, Malaysian Correspondence College, Adabi College and Federal College offered correspondence courses. Some of these continue to operate to this day. In 1971, Universiti Sains Malaysia (Science University of Malaysia) in Penang started to use distance learning with the admission of students pursuing degrees in humanities and social sciences. In 1990 MARA Institute of Technology (now known as Universiti Teknologi MARA) followed suit; offering diploma programs in public administration, banking and business studies. In 1995 the government directed all nine universities operating in Malaysia at that time to open their doors to distance learning.

The demand for higher education among the adult working population for self-development and upgrading of skills has increased tremendously in the country. In the mid-1990s many universities and institutions tried to adopt and implement distance education either 'crafted' in their conventional faculties, or through the establishment of a special unit or institution under the universities or creating solely-devoted institutions.

The government had taken measures to improve accessibility in order to increase participation at all educational levels through the distance learning program as stipulated in the 7th Malaysia Plan. In addition distance education serves those who cannot attend formal schooling in the university owing to constraint of work schedules.

The distance education program is becoming increasingly popular. There is a great demand for adult education among the working population. Public universities have spent a substantial sum to set up specialized centers to cater for distance learning programs such as the Institute for Distance Education and Learning (IDEAL) by UPM and the Extension Education Center (PPL) by ITM. The number of public universities that offer distance education programs has increased from two (1990) to seven today. The number of students has increased from a few thousand to 17,756 in 1996 and 20,000 in 2000. Since then, the programs have expanded rapidly and it is intended that under the Eighth Malaysia Plan (2001 and 2005) Malaysia will have 60,000 distance learners yearly.

Malaysia's first virtual university (UNITAR) began accepting enrolment in September of 1998. It is a private university that is owned by KUB Malaysia Berhad. The university is officially recognized by the Malaysian government and is capable of granting its own degrees. The courses at UNITAR are mostly information and communication technology courses, as those are some of the easiest to offer through a distance-learning mode. UNITAR has a partnership with another company called NIIT. NIIT was brought into the project in order to help develop courseware, software and other materials for the university.

The country's first open university, Universiti Terbuka Malaysia (UNITEM) was established in 2001. UNITEM is managed by a consortium, Meteor Sdn Bhd whose board of directors comprises vice-chancellors and rectors from 11 public universities in the country. UNITEM will utilize all public universities experts and resources to offer the academic and professional development programs in more flexible format.

The delivery systems have evolved from basic correspondence education packages to other distance education approaches. At Universiti Sains Malaysia, for example, since 1988 IT has played a role supporting the print materials, face-to-face contact at Regional Learning Centres. Audio teleconferencing was introduced in 1988, and was upgraded to audio graphic teleconferencing in 1991. Video conferencing was integrated into the system in 1995, a virtual library was launched in 1997, and on-line education was launched in 1999 (Saleh, 1997; 1999a; 1999b).

1.2. Some Institutions that provide D.E. in H.E.

The following are some descriptions of selected public and private universities that provide D.E in Malaysia. Later, we present a detailed case study of one institution - Universiti Putra Malaysia.

Universiti Sains Malaysia, USM (Science University of Malaysia)

The Distance Education Programme of the Universiti Sains Malaysia was established in 1971. It was the first public programme in Malaysia offering degrees through distance education. The primary objectives of this programme are:

- to help adults who had earlier missed the opportunity for a higher education to qualify for a degree;
- to narrow the gap of education opportunities amongst the various ethnic groups in the country;
- to take education to the economically deprived and geographically isolated areas;
- to increase the availability of skilled manpower;
- to improve the performance of those already in employment by up-dating their knowledge and skills.

The School of Distance Education, Universiti Sains Malaysia (SDE, USM) to date has produced over 8,000 (most recent figure - 8,391) graduates. The quality of the distance learning graduate programme is considered to be the same or better than the on-campus conventional mode (Saleh, 1999b).

Universiti Teknologi Mara ,UiTM (Mara University of Technology)

The university was first established as Mara Institute of Technology (ITM) in November 1956. Recently, ITM status was upgraded to a university status bearing the name Universiti Teknologi Mara. The main objective of the university is to provide education to adults to become professionals in the fields of business, commerce and technology. The university has several branches in different states of Malaysia with the headquarters based in the state of Selangor.

Distance learning in the university was launched in 1990 with the objective of providing working adults with academic opportunities to improve and enhance their academic qualifications, knowledge and work efficiency. Diplomas in Public Administration, Banking, Business Studies and Accountancy are currently offered at all of its branch campuses.

Universiti Kebangsaan Malaysia, UKM (National University of Malaysia)

Universiti Kebangsaan Malaysia was established in 1971. The University constitution came into force in 1974. The main campus of the University is located in Bangi, 20 miles south of Kuala Lumpur. The Faculty of Medicine and its teaching hospital is in Cheras, a suburb of Kuala Lumpur.

In July 1993, the UKM medical school launched a new four year postgraduate distance learning programme in Family Medicine. The uniqueness of the programme is its community orientation where the doctors are trained in the community in which they are providing services. The training is organised on a distance learning system.

The implementation of the programme heralds a new era in the development of human resources for health in Malaysia which is marked by heightened cooperation and collaboration between the University, Ministry of Health, the World Health Organisation and the medical profession, as well as the use of distance learning technology through collaboration with Ministry of Health, Commonwealth of Learning and Syarikat Telekom Malaysia (Saleh, 2000).

Universiti Tun Abdul Razak, UNITAR

UNITAR is a private virtual university that started operation in 1998 offering BBA and MBA degrees. Founded in 1997, Universiti Tun Abdul Razak (UNITAR) is a Malaysian private university backed by the country's first cooperative that has metamorphosed into a public-listed company. It is the country's first virtual university. UNITAR fulfils a niche market - tertiary education provided to adult learners - as it reduces the need to be present on campus. The virtual university learning and instructional model offered by UNITAR is designed around the use of interactive multimedia courseware and an intranet designed for faculty use in teaching and learning. The teaching / learning model is a combination of face-to-face student-lecturer interaction and online and multimedia e-learning. Both asynchronous and synchronous modes of communication are used.

Universiti Terbuka Malaysia, UNITEM (Open University Malaysia)

In August of 1999, the Minister of Education made an offer to the Meteor Distance Learning Sdn Bhd, a consortium of 11 public higher learning institutions in Malaysia, to set up the Open University of Malaysia. The move by the Minister led to the establishment of OU Malaysia in August 2000. Universiti Terbuka Malaysia, better known as OU Malaysia is the seventh private university in Malaysia. Although incorporated as a private university and established under the Private Higher Education Institutions Act 1996, OU Malaysia leverages on the quality, prestige and capabilities of its owners - Meteor DL, a consortium of the 11 Malaysian public universities. The Meteor DL consortium coordinates the management of the distance-learning programme. This consortium operates under the private university mechanisms.

OU Malaysia is committed to providing a quality learning environment to its learners and the community. Through its innovative teaching methods, OU Malaysia prepares learners to meet the demands and challenges of Malaysia's changing economy and to provide a basis for lifelong learning in this region. Its strengths span a wide range of disciplines, from IT and Engineering to the Arts and Social Sciences, Business and Science. It employs the latest approaches in the teaching-learning process. It offers academic programmes that cater to the demands of the industry and the marketplace in general. It thrives on its motto of a "University for All" as it believes in the philosophy of education for all. This philosophy implies that education should be made available to all, regardless of time, place and age.

1.3. Who studies by D.E?

The majority of the students who study by D.E. in the various universities in Malaysia are working people. They include schoolteachers, and other government employees from various agencies, employees from the private sectors such as banks, computer companies, and owners of private businesses. These adult students are mostly people who are seeking continuing professional development but who can't afford to leave their job or profession due to various reasons.

The overall numbers of DE students are growing, but still quite modest. For example, since its establishment in 2000, the number of learners enrolled at the OU Malaysia has risen from an initial enrollment of 1,000 students to over 12,000 (Mansor bin Fadzil, 2003). But OU Malaysia is now the biggest provider of DE, offering over half the current DE-delivered degree programs (see Summary Table 1) and representing probably about half the total number of DE students. Based on these rough estimates and the fact that there are around 150,000 students in public institutions and 100,000 in private colleges, it would seem that around 5% of the students in the HE sector are taught by DE (as compared to about 30% in South Africa).

1.4. A Case Study: Distance Education of University Putra Malaysia

Universiti Putra Malaysia (a public university) offers distance education through one of its outlets, "IDEAL" the extended nomenclature being "Institute for Distance Education and Learning". UPM in line with the Ministry of Education, call for Institution of Higher Learning to offer distance learning programme, started IDEAL formally on June 26th 1995 with a mission: -
"To create such a vision that all the aspirants get an opportunity for education in a democratic manner and succeed in higher education and life long learning".

For effective functioning and in a bid to achieve its mission, IDEAL has been underlined with the following objectives: -

- To conduct and coordinate distance education and open learning activity of Universiti Putra Malaysia.
- To provide an opportunity to the people of Malaysia especially those in service as well as people in public and private sector, to get education at higher level.
- To help Malaysian in human resource development which can serve as a pathway for National development
- Using the expertise of UPM in various fields to its full potential for mental emancipation and development of citizens and country on the whole

Currently, IDEAL is undertaking 23 academic programs comprising of 18 bachelor degree program and five master degree programs. All of the academic programs belong to their respective faculties. IDEAL has adopted the curriculum of the faculty for all the courses offered. IDEAL only manages the program rather than acting as an academic faculty. IDEAL has to follow all requirements and procedures set by the faculties concerned such as entry requirements, academic system, duration of graduation, evaluation system etc. The academic systems are the same as for the full-time students. The main difference is the mode of teaching and learning using the distance education mode.

The enrollment of students has increased considerably. While IDEAL had only 37 students in 1995, the total has increased with the intake of from 2,000 to 3,000 a year. The total enrolment up to November 2002 was 15,536 (8 % of these are master degree students). IDEAL has up to now successfully graduated 4,704 graduates (including 233 from the Master Program).

Who are the distance learners?

IDEAL distance learners are adults, the majority (78%) above 30 years of age and with an average age of 34 years and 22% above 40 years old. The overall age ranges from 22 to 71 years old. The ratio of male and female students at present is 51.01 percent male and 48.99 percent female.

Almost all the students (98 %) are working in the private sector, the governments and for NGOs. During the initial stage of the distance program, the majority of the students were teachers from primary and secondary school in line with the government policy to upgrade non-graduate teachers. However, recently the distance program has attracted a working population from the private, governments and non-government organizations. They include policemen, army, journalists, airhostesses, clerks, managers, nurses, and even the housewives and pensioners.

The Academic Programs

At present, the following programs are offered:

Bachelor Degree Level:

Bachelor of Education (Teaching English as a Second Language)
Bachelor of Education (Guidance and Counseling)
Bachelor of Education (Teaching Malay as the First Language)
Bachelor of Science (Human Resource Development)

From the Faculty of Education

Bachelor of Science (Honours) Biology
Bachelor of Science (Honours) Chemistry
Bachelor of Science (Honours) Mathematics
Bachelor of Science (Honours) Statistics
Bachelor of Science with education (Honours) Biology
Bachelor of Science with education (Honours) Chemistry
Bachelor of Science with education (Honours) Mathematics
Bachelor of Science with education (Honours) Statistics

From the Faculty of Science and Environment Studies

Bachelor of Communication
Bachelor of Arts (English Language)
Bachelor of Arts (Malay Language)

From the Faculty of Modern Languages and Communication

Bachelor of Computer Science

From the Faculty of Computer Science and Information Technology

Bachelor of Science (Human Development)

From the Faculty of Human Ecology

Bachelor of Business Administration

From the Faculty of Economy and Management

Master Degree Level:

Master of Science (Human Resource Development)
Master of Science (Corporate Communication)
Master of Science (Teaching Malay as First Language)
Master of Science (Sustainable Resource Management)
Master of Arts (Malay Language) Human Resource Development)

The Teaching and Learning System of Distance Education

IDEAL practices a teaching - learning system based on self-instructional learning modules. Learning modules are distributed to students. To ensure students can study effectively, they are provided with various supporting activities such as minimal contact face to face with the lecturers on the campus, tutorial sessions with the tutors at the learning centers, supplementary learning materials such as books, CD, video etc.

The learning modules were prepared by the lecturers who are teaching the respective courses. IDEAL with the help of the faculty appointed the module writers. Courses on module writing were provided for the writers. Teaching lecturers come from the respective faculties and there are about 200 lecturers involved in distance learning. Selection of the lecturers involves those who possess a Doctoral or, minimally, a Masters Degree, with relevant years of teaching experience.

Lecturers are required to interact with the students using e-mail and phone. Also, some face face-to-face session takes place at campus during weekends at the campus. There are only two or three face to face meetings in a semester. Matters related to course work, assignment formats, study plans and guides, assessments and others are discussed during these sessions.

Students are also required to attend tutorial sessions given by the local tutors during weekends at the learning centers. There are about 400 tutors that have been appointed by IDEAL throughout the country. IDEAL has established learning centers in cooperation with local private providers throughout Malaysia. Thirty six centers were established to facilitate and support distance learners at the local level. Each learning center is equipped with tutorial rooms, a resource centre, telephone, internet access, computers, audio-visual equipment, reference books and journals, a coordinator and other personnel.

IDEAL and the MSc in Sustainable Resource Management

The MSc program in Sustainable Resource Management is the newest masters program developed at IDEAL. It was developed through collaboration with the SEAMO Regional Centre for Graduate Study and Research in Agriculture (SEARCA), the Southeast Asian University Consortium for Graduate Education in Agriculture and Natural Resources (hereafter referred to as the University Consortium), the University Consortium Distributed Learning project and the University Consortium Distributed Learning Project Planning and Management Committee. Members of the University Consortium are:

- Institut Pertanian Bogor (IPB) of Indonesia
- Universitas Gadjah Mada (UGM) of Indonesia
- Universiti Putra Malaysia (UPM)
- University of the Philippines at Los Baños (UPLB)
- Kasetsart University (KU) of Thailand
- University of British Columbia (UBC) of Canada
- University of Queensland (UQ) of Australia

Currently, the MSc in Sustainable Resource Management is a structure C program, meaning that it consists of 36 credit hours including a nine-credit hours project paper. There is no thesis or research component to this program. The program aims to equip the learner with the ability to articulate the principles and practices of sustainable resource management, design strategies, and apply strategies toward developing solutions to improve productivity and resource use efficiency, reduce environmental degradation, promote short- and long- term economic viability and enhance regional and international perspectives. The target learners are those who are involved in sustainable development such as land use and planning, urban development, agriculture development, ecotourism, forest management, park and recreation, water shed management and environment impact assessment.

The program is focused on an interdisciplinary courses addressing issues related to efficient use and management of natural resources and the environment, economics, policies, and ecology for sustainable development. The courses are Biodiversity and Conservation, Land and Water Conservation ,Natural Resource Policies, Natural Resources Economics, Project Planning and Management, Biological Control of Crop Pests, Land Contamination and Pollution, Sustainable Forest Resource Development, Pest Management Decision Making and Crop Ecology and Cropping Systems. The courses come from not only the Faculty of Agriculture, but also from the Faculty of Forestry, Economics and Management, and Science and Environmental Studies of UPM.

This course is a unique addition to the other distance education courses at IDEAL. Besides allowing the student to learn from his/her own environment, the program also allows the student to take courses from other institutions. Currently, there are three institutions contributing to the MSc in Sustainable Resource Management; UPM, UBC and UQ. Students will enroll for the program at one of the universities and then have the option of taking some elective courses from the other participating universities. There are four courses from UQ i.e. Environmental Problem Solving, Contemporary Protected Area, Ecotourism and International and National Conservation Policy and two courses from UBC i.e. Integrated Watershed Management and Urban Watershed Management. The one restriction being that the cross-enrolment may not exceed 30% of the total program credits. This means that 70% of the total credit load of the program must be taken from the university that is granting the degree.

The mode of learning for this program, and most distance education programs at IDEAL, is that the learning materials, in printed and CD-ROM form, are sent to the students for self-directed study. There is also a web-based instruction and on-line learning component to the course. There are three optional face-to-face tutorials held at UPM campus in Serdang, Selangor for students who can attend and those who want more direct contact. Each student is also assigned a tutor for the project paper to give them guidance and assistance. Details of the program can be accessed at the following URL:
<http://www.ideal.upm.edu.my/bm/program/mssrm/mula.html>

1.5. What media and technologies are used?

Malaysia, unlike many developing countries of the third world has gone full circle as regards the technologies for distance learning. The first generation of distance learning was mainly paper and print based. This was followed by audio cassettes, audio conferencing, audiographic conferencing, one-way video, two-way video and computer conferencing. Now, Malaysia is well on the way to being one of South East Asia's leaders in the application of digital information technologies to education.

Malaysia saw the launch of its first satellite; the Malaysia East Asia Satellite, Measat-1 on the 13th January 1996. Measat-1 represented a category of new generation satellite for direct users service by television users in homes as well as institutions. Users only need a small 500 cm antennae and a receiver. In short the transmitter allows for voice, data and video transmission which is suitable for interactive distance learning. Later, in November 1996, Measat-2 was launched.

The rapid growth of information technology (IT) globally has also spurred the growth of e-learning projects in higher education in Malaysia. The National Information Technology Council (NITC) was set up in 1995 to spearhead, discuss and give leadership for the development of information technology in the country with the view of legislation, implementation and studying the impact on society. This gained further momentum when the Malaysian government announced the development of the Multimedia Super Corridor in Putrajaya where IT companies from all over the world are housed and given tax breaks to carry out IT business. Just to underscore the seriousness of the government in IT, it devoted a whole chapter in the Seventh Malaysia Plan to IT development. One government-linked private university, Universiti Telekom, has even changed its name to "Multimedia University" to capitalize on its special area of focus.

Despite the excitement, the new technologies in Malaysia are still very new and not widely used in education. Research at Universiti Sains Malaysia showed that printed materials still form the backbone of many DE courses and greatly influence the learning process. Audio conferencing has been used since 1988. In 1991 texts and graphics generated by the computer were added in a two-way information flow using phone lines. At Universiti Putra Malaysia most of the DE courses materials come in the form of printed modules. However, courses conducted online, require students to use the web to access course materials and emails to interact with their respective lecturers or tutors or other students.

Nevertheless, the recent waves of newer DE courses are coming to rely more heavily on the new digital technologies. The following case example illustrates the trend.

UNITAR - a recent case study (adapted from Boucher, 2000).

At its inception, the university established two faculties - Faculty of Business Administration and Faculty of Information and Technology. Postgraduate programs were subsequently introduced - Master of Business Administration, Master of Information Technology Management, Master of Information and Multimedia Technology and Master of Science by research and PhD by research. The Faculty of Humanities and Social Sciences was recently introduced offering the Bachelor of Arts, Bachelor of Science and Bachelor of Management. The learning and instructional model at UNITAR is designed around the use of interactive multimedia courseware, online tutorials and face-to-face discussions with lecturers.

Courseware

The most important component in the virtual learning model at UNITAR is the courseware that would determine the quality of teaching materials that are delivered. The materials are developed in the multimedia rich interactive format and stored in CDs. The main reason for the use of CDs is to overcome the bandwidth problem, especially in the remote areas of the country. However, since the CD is rather costly to produce and takes time to develop, the university also develops web-based materials that are not as multimedia rich, but could be done in a more interactive manner. Videotaped lectures with PowerPoint slides are also used especially for newly introduced courses. This approach is found to be faster and cheaper and could be constructed without preparing the complete modules. This initial approach is used when courseware has to be immediately developed. CDs are normally used for lower level courses while web-based are for higher level courses. The emphasis is on interactivity to ensure effective learning.

Virtual Online Instructional Support System (VOISS)

VOISS is the main delivery system that contains about ten different functions, such as online tutorials, forums, emails, bulletin boards and announcements. The most utilized functions are the online tutorials, forums and emails. Online tutorials are conducted regularly for different groups by different academic staff. Students log in at the scheduled time to follow the tutorials. The screens in the students' computer have three parts. The first and the biggest part is the white board that is used by the lecturer to write notes to flash the PowerPoint slides. The second part shows the identification of students who have logged in. The third part contains email messages from students who send their queries. The lecturer can speak to explain the topic or issues and can spontaneously answer the questions sent by students by email. The second most popular function is the Forum that is used for discussions on various issues raised by the lecturers pertinent to the course. Students are required to participate in such forums as part of their learning process. Their responses are graded. Emails are used to send assignments to their lecturers. Students also send queries to their lecturers at any time by using this email facility.

Virtual Library

The library houses electronic collections in the forms of CD-ROMs and subscriptions to electronic databases. In addition, the virtual library allows students to access reference materials, journals, magazines, additional lecture notes, CDs, videos and other available electronic books and resources that can be downloaded by students or sent to specific email addresses for the convenience of the students. The library itself does contain physical books and other reference materials that have not been digitized. More than 3000 titles are available for access by the students and lecturers.

Call Center

The Call Centre provides a round the clock support for students to send queries by email or telephone calls. The queries will be distributed to the lecturers or other staff who will provide a response within a specified time.

Study Centers

There are 10 UNITAR study centers located throughout the country. The study center is a miniature campus that houses workstations that enable students access to the virtual library, call centre and network system server farm. The study centre also serves to provide an avenue for students and staff to meet for academic and social activities. A computer accessory shop, cyber café, classrooms, academic, administration and student affairs offices are also found at these centers. In its current form the concept involves the creation of community-based access points where connectivity to networks is provided and access to information and communication technology appliance is made available.

Implementation

It took about nine months to establish the study centers. In terms of the courseware which was CD based, the university was only ready to receive first year students for both the Bachelor of Business Administration and Information Technology programs. Web-based courseware was developed later in the program. The Master of Business Administration, Master of Information and Technology Management and Master of Information and Multimedia Technology was introduced in the second semester. In the third semester of the same year, Master of Science and Ph.D. by research were introduced. A three-semester system is used to reduce time and cost for students and the university.

OU Malaysia (this case study was adapted from Mansor bin Fadzil, 2003)

In order to facilitate students' learning, the university provides several support services as follows:

Learning materials

Although specially constructed printed modules make up the vast amount of learning materials, where necessary, audio or video tapes, CD-ROMS and other reading materials are also made available for students use.

MyOUM

This is a portal that is tailored to the needs of an individual students. The portal enables students to access E-mail, Learning Management System, and the Digital Library. University management uses the system to provide online bulletin, timetable, deliver assignments questions, examination results and announcements.

Learning Management System (LMS)

LMS is an application that allow students, tutors and administrators to upload information for the purpose of learning, support and and keeping track of the learning process.

Digital Library

In order to support an open learning environment, the library collection is comprise of digital and print collection. The digital collection include two e-book databases with more than 15,000 titles in various disciplines. Another component of the digital collection is e-journals.

2. Government Policy and regulation of D.E.

2.1. National and Institutional level.

One may open the discussion of national policy on Higher Education on Malaysia with a quote from a speech delivered in 1998 by Dr. Johari Mat, Head of the Malaysian delegation to the UNESCO World Conference on Higher Education.

"For so long the public sector has been the sole provider of higher education. To a large extent, through its affirmative actions, the public sector has been able to ensure broader access to higher education to the disadvantaged sections of society. The question is: To what extent can we rely on the private sector to address some of the imbalances and inequities in terms of opportunities to higher education? What policies and strategies need to be put in place to ensure that private sector providers act responsibly and are accountable to society at large? Granted that the private sector can help alleviate some of the financial problems in funding higher education, our challenge is also how to nurture the orderly growth and healthy competition between public and private institutions. Expansion in enrolment also brings with it a much diverse student population with different needs. No longer is higher education aimed at meeting the needs of homogenous group of 18-21 years old who study full time. The challenge is also how effectively can institutions of higher education respond to the needs of mature students who wish to study on a part time basis or those who wish to update their knowledge and skills to keep up with the changing job environment. This requires institutions of higher education to develop new programmes, renew existing contents as will as introduce new modes of delivery to respond to these new needs".

This quote illustrates an important recent trend in Malaysian Higher Education policy - an integration of public and private sector activity and a shift of the ministry of Education from the role of sole provider to one of regulator. Private higher education has expanded tremendously in the last two decades. The state now plays a strong regulatory role vis-à-vis private higher education. In 1996, the Private Higher Educational Institutions Act was passed, which defines the government's regulatory control powers over all private education institutions in the country. Approval must be obtained from the Ministry of Education to establish a private institution or introduce new programs. In 1997, the National Accreditation Board was created to formulate policies on standards and quality control as well as accrediting the certificates, diplomas, and degrees awarded by private institutions.

In 1996, the government established the National Council on Higher Education, whose main function is to plan, formulate, and determine national policies and strategies and oversee both the public and private sectors, so as to ensure better coordination of the country's higher education system. The government would like the private sector to complement and supplement the efforts of the public sector and has sought to steer the private sector toward providing more vocational and technical education.

Thus, there has been a gradual shift from state control toward state supervision in the relationship between the Malaysian government and higher education. In the state control model, the Ministry of Education regulates access conditions, the curriculum, degree requirements, examination systems, the appointment and remuneration of staff, the selection and admissions of students, and other administrative matters. Conversely, in the state supervisory model universities are responsible for their own management and generation of their own revenues. In this model, the state oversees the higher education system in terms of assuring quality and maintaining a certain level of accountability. With the corporatization and privatization of higher education in Malaysia, the shift is from central state control to market-based policies, which will increase the range of choices for students and address the needs of an increasingly complex social order. However, the Malaysian state will still maintain a central steering role to ensure equity access, consumer advocacy, and national identity, which are broader social and cultural goals that transcend the

market.

In the Distance Education sector, there are several forces driving the development of virtual and distance education in Malaysia:

- Demand for a skilled workforce and professionals who are conversant with information technology issues and uses
- Flexibility and suitability of Information and Communications to educational applications, together with the continuing decrease in the cost of hardware. People in Malaysia are seeking opportunities for lifelong learning, and with diverse personal circumstances, they require flexible access to learning opportunities and venues
- The realization that the quality of the learning experience can be enhanced by applying learning technologies
- The demand from isolated learners for more equitable educational access and services

Given these factors and the immense cost of establishing a conventional university, the government is supportive in facilitating change and liberalizing and democratizing Higher Education in the country through virtual and distance education. This can be seen in the following extract copied from the Ministry of Education's website.

"We have set the stage for a major revolutionary change in our education system. Since 1995, my Ministry has successfully pushed through six pieces of legislation to position Malaysia as a regional education hub. The Education Act 1996; National Council on Higher Education Institutions Act 1996; the Private Higher Education Institutions Act 1996; National Accreditation Board Act 1996, the Universities and University Colleges (Amendment) Act 1996 and the National Higher Education Fund Board Act 1997 have facilitated a more market-centred education system".

With the legal framework almost complete, the education system is indeed set for a quantum leap which will bring sweeping changes to our institutes of learning, enabling them to offer a wider range of courses, different options and approaches to learning, better management, new teaching methods and an overall increase in productivity and standards

To take full advantage of the opportunities offered by an increasingly borderless world, foreign universities are being encouraged to set up offshore branches in Malaysia, but only the best will receive approval. At the same time corporations have been given the mandate to establish private universities. This dynamic relationship between government, the private sector and strategic foreign academic partners will no doubt help us realize our goals. By building a world class system that is flexible and innovative we hope to create here in Malaysia a regional education hub and a centre for educational excellence".

The Malaysian approach to Higher Education, at Government level is, thus seen to be very "business-like", which means to imply that the role of universities is seen as supporting business and that universities themselves should run as businesses. For some years now, public universities have been "corporatized" meaning that they should run along business lines, seeking cost recovery and thus depending to a lesser degree on public funding. The history of this trend is as follows.

From 1971 till 1992, USM was the only public higher learning institution offering courses at tertiary level through the distance learning mode. In 1995, the Minister of Education advised other public universities to offer courses through distance education. This was coincident with the move by the Ministry of Education to "corporatize" all the public universities where the universities will become less dependent on the subsidy from the government, and increased the efficiency of the management system. Therefore, the newer (since 1995) public universities involved in distance education had a different approach as compared to USM. Their programmes are based on cost recovery and self sufficiency. USM is still principally an alternative mode for adult learners and highly subsidized by the government (up to about 80%). USM is the only institution in Malaysia which is still providing tertiary education as the social service of the Malaysian government to its citizens.

This may help to explain the apparently paradoxical situation that the OU Malaysia, although set up and managed by a consortium of public universities, actually operates as a private institution and is governed by the rules that apply to private universities. However, in the Malaysian context, that may not make as much of a difference as it could in some other countries, as the rules that apply to public and private institutions are very similar. This is illustrated by the following example.

There are now about 600 private higher learning institutions in Malaysia offering degrees and diplomas in various fields of study. They complement the work of the public universities in delivering higher education. Enrolment in the private colleges (now around 100,000) gained momentum soon after the economy went into tailspin in July 1997 when the Malaysian Ringgit plummeted from RM2.5 to the US Dollar to RM4.2, before being rescued by the government through capital control.

With so many private colleges around, who undertakes quality control of private higher education in Malaysia? Answer: the same organ that regulates the public sector. In 1997 the Malaysian government established a National Accreditation Board (or LAN by its Malaysian acronym) to accredit (and eventually give ranking to) all institutions of higher learning (both private and public). The work of this board is quite enormous as they have to scrutinize every curriculum that needs to be accredited. Before a college, whether public or private, can run a course, it must first meet the same "minimum standards" set by LAN.

2.2. Program level.

Any programme offered through distance learning mode must follow the same structure as the equivalent on-campus programme. A draft curriculum is usually prepared by a select committee made up of internal experts. The curriculum development committee discussed thoroughly the draft before get approval from the school board. The proposal is sent to the academic planning committee, then to the senate for scrutiny and approval. This is normal practice in the public universities offering D.E programmes. In the public universities courses offered for D.E programmes must follow the same syllabus as on-campus courses. However, unlike the case in some other countries (e.g. Brazil), the distance-learning version of a previously approved campus-based course is not treated as a completely new programme, requiring separate approval from the LAN. The "minimum standards" set by the LAN are equally valid for both conventional and distance-learning versions of the same programme.

In the case of a new programme, whether to be campus or distance delivered, the typical procedure is as follows. The university senate will form board of studies where the members of the board will comprise representatives from the private and government agencies, professional bodies, individuals who are experts in the respective field, librarian to go through the proposal together with the internal experts and the university top management. The duty of this board of studies is to study the programme thoroughly and make recommendation, in a complete report to the senate for approval. The senate will ask for approval from the Ministry of Education for implementation and funding.

Although there may be some detailed differences, all public and most private universities follow similar procedures. The case of University Sains Malaysia (USM) may serve to illustrate the typical details (Saleh 2000 - available online).

"The USM senate is very concerned with the quality of the graduates who go through the distance learning programme. Therefore, since the start of DE activities in 1971, it has been the policy of the university that only those programmes that are already offered on-campus can be considered to be offered through the distance learning mode (this is now standard practice in all public and accredited private universities). Even then, it must go through rigorous study by the internal experts and the school board first before the board of studies make recommendations to the senate for approval. Then, the proposal is sent to the Ministry of Education for the final approval before offering. Each new programme must go through this strict procedure thoroughly even though the programme follows the same curriculum and the same or equivalent course structure as on-campus courses."

The USM distance learning programme which has been in operation for more than 30 years has gone through two rigorous external evaluations. Those evaluations were done to check whether the programmes offered fulfil the programme's objectives. The programme was launched in 1971 on an experimental basis till 1982 when its status was changed to that of a regular programme giving the status of an established faculty (Dhanarajan, 1987).

From its inception in 1971 till 1992, the students were expected to spend a compulsory residential on-campus together with other final year students. This provision of the university senate was to maintain the high quality of the USM degree. From the intake of 1992/93 and 1993/94 for the sciences and arts programmes, respectively; the final year on-campus requirement was abolished. This decision was taken after careful study and the senate was satisfied that the quality of the distance learning mode is the same if not better than the conventional mode in the final year on-campus.

2.3. Course design, implementation and evaluation level.

The lecturers selected to develop course materials and facilitate students learning are lecturers who also teach the same courses on-campus. The lecturers must have at least a Masters degree and experience in a particular course to qualify to teach a given DE course. To implement the DE programme each university must have the appropriate facilities (e.g. laboratories, student access to library resources) and support staff to facilitate student learning. In order to evaluate student performances for each course, several evaluation methods are used. This continuous assessment will include individual or group assignments, projects, tests and final examinations. The test and examinations may comprise of objective and subjective items. Some programmes require students to carry out industrial training at appropriate settings or student teaching or practicum in selected schools. For this the universities are expected to network with schools, government agencies and the private sectors to provide access to needs for teaching practice, industrial training, and supervisory work.

2.4. Course materials and logistics level.

In universities like Universiti Putra Malaysia (UPM), course materials for undergraduates must be written in the Malay Language (Bahasa Melayu) -except for courses that must be taught in a particular language such as English, Arabic, Mandarin etc. However, graduate courses as far as possible should be written in the English Language. This is because sometimes certain international students (non-native speakers of Malay Language) also take these graduate courses. As far as UPM is concerned, a panel of evaluators for quality control will evaluate course materials such as printed modules. Modules that are defective will be returned to the authors for improvement before student use.