Vol.2 No.2





Sian Journal of University Education

December 2006

Faculty of Education

ISSN 1823-7797

1.	Internationalisation of Malaysian Universities: A Case Study of the National University of Malaysia Norzaini Azman Yang Farina Abd. Aziz	1
2.	Academic Success in a Pre-Degree Programme: A Study of Students in the Faculty of Education, Universiti Teknologi MARA Lee Lai Fong Marina Mohd. Arif Richard Holmes	25
3.	Applying Service Performance Guarantees to Reduce Risk Perception in the Purchase and Consumption of Higher Education Nooraini Mohamad Sheriff Faridah Hj. Hassan	35
4.	Self-Determination in Malaysian Education: Making Decisions and Taking Action in this Era of Challenge and Opportunity Dawn Yonally Stuart Ervay	47

5.	Persepsi Guru Sukan Terhadap Aspek Keselamatan		
	dalam Program Sukan	57	
	Mawarni Mohamed		
	Mohd. Sofian Omar Fauzee		
	Lee Teik Soon		
	Zarina Jusoh		
	Rosli Jamil Ahmad Zainudin		
6.	Tahap Literasi Komputer Pelajar: Satu Tinjauan Awal	75	
	Normala Ismail		
	Mohamad Kamil Ariff Khalid		

Internationalisation of Malaysian Universities: A Case Study of the National University of Malaysia

Norzaini Azman Yang Farina Abd. Aziz Universiti Kebangsaan Malaysia Email: nurzai12@pkrisc.cc.ukm.my

ABSTRACT

The Malaysian government aspires to be the educational centre for excellence in the Asian region. Strategies for internationalisation are central to the scope the Ministry of Higher Education has taken and the goals it has set for the future. This article examines how Universiti Kebangsaan Malaysia (National University of Malaysia) is responding to the internationalisation phenomenon. This paper begins by outlining the rationale for internationalisation strategies and their potential consequences for Malaysian universities in order to set the context for discussion. Using Universiti Kebangsaan Malaysia (UKM) as a case study, this article examines activities involved in the pursuit of internationalisation. The emphasis is on what has been done and achieved thus far by UKM to reflect its image as "the National University with an international reach". A discussion of UKM's experience in internationalisation practices will, it is hoped, shed light on the general current state of internationalisation in the Malaysian Public higher education system.

Introduction

The world economy is experiencing unprecedented changes as we progress through the new millennium. New developments in science and technology, competition, media revolution and internationalisation are revolutionising the education sector. There are evidently several paradigm shifts in higher education, from "nation" to "global education",

from "general education" to an "educational system driven by market forces", from "education for a few" to "lifelong education for all", from "teacher centred" to "learner centred education". These changes make new demands and pose fresh challenges to our established higher education systems and practices.

Internationalisation has accelerated many changes in the context and conduct of higher education. Internationalisation has been defined as the process of integrating international dimensions into teaching, learning, research and service (de Wit, 1995; Knight, 1994; Knight & De Wit, 1997, The International Association of Universities, 2003). This definition emphasises the ongoing nature of internationalisation as a process and as a response to globalisation. Thus, an international dimension introduces or integrates an international/intercultural/global outlook into major functions of a university. Ebuchi (1999) also sees internationalisation as a process by which the teaching, research and service functions of a higher education system become internationally and cross-culturally compatible while The International Association of Universities (2003) refers to internationalisation as "a process driven by strategy with specific objectives, means and a framework for monitoring progress." (p. 2). A further definition of internationalisation is offered by Ellingboe (1998) who referred to the process of integrating an international perspective into a university system as "an ongoing, future oriented, multi-dimensional, interdisciplinary, leadership-driven vision that involves many stakeholders working to change the internal dynamics of an institution to respond and adapt appropriately to an increasing diverse, globally focused, ever changing external environment". (p. 199). To meet the challenge, various internationalisation policies and strategies have been drafted and implemented by higher education institutions in relation to the definitions, quantity and quality of internationalisation. They include activities such as cross-border higher education provision, franchising, international e-learning, provision of courses for international students, recruitment campaigns and more programmes in English.

The concept of internationalisation in higher education is related to two other concepts, globalisation and nationalisation. Internationalisation can be seen as strategies to expand higher education provision and ideas across national boundaries. According to Knight (2002), globalisation and internationalisation are related concepts, and internationalisation of higher education can be seen as a proactive response globalisation.

The process of globalisation makes the marketplace stronger. The higher education industry will move in the direction of what the students

demand and expect from tertiary education. The students' expectations will be greatly influenced by the requirements of potential employers. Increasingly, employers now look for a graduate with an international outlook. Employees are expected to adapt to changes quickly, possess good communication skills, to be exposed to multicultural experiences, and be reliable, open minded, tolerant and ever ready to face the challenges of globalisation. The curricular in a university must therefore reflect the international component, which may be interpreted as curricula aimed at preparing students for performing (professionally/socially) in an international and multicultural context, and designed for domestic students as well as foreign students (Jarvis 2001). Of course, certain courses such as Chemistry cannot be internationalised as the facts and theories are the same wherever it is taught. However, courses dealing with Business and Economics are disciplines described as having a strong international profile.

One of the challenges that is common for the new borderless world is the introduction of the General Agreement on Trade in Services (GATS), an offshoot of the World Trade Organisation (WTO). Under GATS, there should be progressive liberalisation in services that include education. If Malaysia decides to subscribe to GATS then our education industry will face tough competition from international providers such as Universitas-21 (which is a consortium of research-based universities), which are developing an e-learning programme in collaboration with the Thompson Organisation. Under GATS all trade barriers must be removed and in education this will mean no subsidies for local providers, no delay in approvals, no tax discrimination and many other incentives that will provide advantage to the local providers. The process of student intake must be made more transparent especially in matters connected to visa issuance. Specifically, the GATS aims to create a "level playing field' so that there is no discrimination against foreign corporations and no advantage given to local providers (Knight, 2002).

To sum up, internationalisation seems to take the form of both competition and co-operation at various levels of the higher education system, and seems to be related to the re-conceptualisation of the task of higher education and higher education organisations or ministries in the society. In this paper, we report how Universiti Kebangsaan Malaysia (UKM), the National University of Malaysia is responding to the internationalisation phenomenon in our culturally complex, and social contexts. As a national university under the jurisdiction of the Ministry of Higher Education, UKM's experiences and practices may show some light on the general

conditions at many other Malaysian universities. However, this article does not aim to claim that UKM's practices are representative of the accurate situation in Malaysia. The perspectives presented in this article are derived mainly from theory, research and the experiences the authors have gained in working with internationalisation activities in UKM.

Malaysian Higher Education System

The Malaysian higher education system consists of 17 government-funded universities, 20 private universities and 300 private colleges. These are multi-faculty institutions with which offer a wide variety of courses. As of 2005, over 700,000 students are enrolled in institutions of higher learning, over 60% of whom are women (Ninth Malaysia Plan 2006-2010). Malaysian degrees correspond to bachelor's, master's and doctoral degrees. The bachelor's degree requires at least three years of full-time study while the master's degree requires an additional two years. Full time studies for a doctoral degree take approximately another four additional years. In most fields, students are able to choose from a wide variety of options, including their choice for minor subjects. Efforts are taken to enhance the quality of education in public and private institutions of higher education. The Malaysian Qualification Framework was developed to assure the standards of qualifications and quality of delivery in universities. (Ninth Malaysian Plan 2006-2010).

The Malaysian higher education system underwent considerable expansion from 1980 to 2000, and there are now 15 universities in West Malaysia and two in East Malaysia. The universities were until 2004 administered under the Department of Higher Education under the Ministry of Education. In 2004, the governance at the ministerial level was rearranged to ensure expansion and sustainability of tertiary education in Malaysia. The Ministry of Education was split into two. The emergence of the new Ministry of Higher Education was aimed to help promote Malaysia as an education hub. These included the implementation of a quality assurance system, promotional activities and the establishment of foreign education offices in Beijing, Dubai, Ho Chi Minh City as well as Jakarta to market the education products that Malaysia has to offer. A special envoy equivalent to a ministerial status was elected to attract blueribbon foreign universities to set up branch campuses in Malaysia. With these efforts, enrolment of foreign students in educational institutions increased to 50,380 in 2005. Of this total, 82 per cent were in institutions of higher education, and the students were mainly from East Asia and Pacific, followed by ASEAN countries (Ninth Malaysian Plan 2006-2010: 246).

Rationale for the Internationalisation of Malaysian Higher Education

The Malaysian government has a number of different rationales and motivation for its universities to integrate an international dimension into the education system.

Firstly, internationalisation of the higher institutions is considered by Malaysia as a way to strengthen and promote national identity. The present era of increased globalisation of economies, technologies, and communication has posed a threat to the survival of national identities and culture. In some aspects, globalisation has been cited as synonymous with denationalisation or westernisation (Scott, 1998; Bartell, 2003). As such, cultural, scientific and educational exchanges between Malaysia and other countries are ways to keep communication and diplomatic relations active, which is an important political rationale. In addition, the promotion of national culture is a way to respect cultural diversity and to counterbalance the perceived homogenising effect of globalisation (Bartell, 2003, American Council on Education, 1999). The acknowledgement of cultural and ethnic diversity within Malaysia and between countries has long been considered a strong rationale for the internationalisation of Malaysia's education system.

In addition, there is a strong interest in Malaysia to make the export of education products and services a major part of our foreign policy. Malaysia aspires to be a "regional centre of excellence for education" and the strategic programmes undertaken by its universities will consolidate and strengthen its position in the long term. Thus, education is seen as an export commodity through more strategic marketing and branding of educational products in order to attract a target of 100,000 foreign students at all levels by 2010 (The Ninth Malaysia Plan 2060-2010). There is 2.5 billion Ringgit savings for the government when local students choose to study in the country taking advantage of the many internationalised programmes available. There are currently about 50,000 foreign students in Malaysia from 150 different countries netting a revenue of 1.5 billion Ringgit for the country. This market orientation introduces the economic rationale for internationalisation of Malaysian higher education.

The economic rationale is considered important and relevant to Malaysia. As a result of the globalisation of the economy, a growing interdependence among nations and the information technology, Malaysia, like other countries is focusing on our economic, scientific and technological competitiveness. Effective ways to improve and maintain a competitive edge are through developing a highly skilled and knowledgeable workforce and through research (Knight, 2002; Welch, 2002). These are the responsibilities of the universities and therefore, there is a closer link between internationalisation of the higher education institutes and the economic and technological development of the country.

Finally, the preparation of scholars and graduates who are internationally knowledgeable and competent is commonly cited as one of the rationale for internationalisation (Knight, 2002; Welch, 2002). The present labour market requires new graduates to function in a more international work environment. Malaysian graduates will have to live and work in a world in which national borders are permeable, information and ideas flow at lighting speed, and communities and workplaces reflect a growing diversity of culture, languages, attitudes and values. This has repercussions for the qualifications of future generations and certainly for the qualifications required by the future leaders of the country. Competitiveness of the labour market in Malaysia dictates that higher education turns international. This applies to the clients of higher education, i.e. the students, who have an interest in their future employability in foreign labour markets as well as in the Malaysian labour market, which has become increasingly internationalised. This consideration also applies to the Malaysian government (who in most cases is the provider of HE funding), which has an interest in the formation of human resources able to face the challenges of the future. Together with the business and private sectors, which represent the governing boards of most universities, they strongly advocate the internationalisation processes of Malaysian higher education (The Ninth Malaysian Plan 2006-2010).

Universiti Kebangsaan Malaysia (UKM) was formally established in 18 May 1970 after overwhelming support from the Malay population who wanted to see the establishment of a national university with the Malay Language as the medium of instruction. As a national university, UKM aims to contribute to the advancement of knowledge in arts, religion, humanities, science and technology through the medium of Bahasa Melayu as the official medium of instruction. From a university formed from the call of the people, UKM has not only proven that the Malay language can be successfully used at the tertiary level but it has now been identified

as a research university by the Malaysian government (The Ninth Malaysia Plan 2006-2010: 31-32). In May 2006, UKM celebrated its 36th anniversary.

UKM has expanded to 11 faculties, namely the faculties of Economics and Business, Engineering, Education, Islamic Studies, Medicine, Science and Technology, Social Sciences and Humanities, Law, Information Sciences and Technology, Allied Health Sciences, and Dentistry. The university has eight specialised research institutes which are the Institute of The Malay World and Civilisation (ATMA), the Institute for Environment and Development (LESTARI), the Institute for Malaysian and International Studies (IKMAS), the Institute of Microengineering and Nanotechnology (IMEN), the UKM Medical Molecular Biology Institute (UMBI), the Institute of Occidental Studies (IKON) and the Malaysian Genome Institute (MGI). Apart from the eight research institutes, UKM has two research excellence centres, the Centre for Gene Analysis and Technology (CGAT), and the Centre for Advanced Engineering. In addition, UKM has founded a private limited holding company known as UKM Holdings, which handles commercial activities.

UKM seeks to generate and transmit new knowledge, prepares qualified professionals and at the same time preserves, strengthens and disseminates national identity, language and culture. Through the years, UKM has sought to foster an interdisciplinary and multidisciplinary approach to exploring the areas where the sciences, technology and social sciences meet. This has resulted in the restructuring of faculties and in the adoption of a system of majors and minors. Besides offering programmes that are soundly rooted in their disciplines, UKM attaches great importance to the development of a holistic graduate and a globally competent citizenry through its co-curricular programmes. Suffice to say that with UKM's broad infrastructure, range of educational activities and volume of research, together with the services it provides make the university one of the country's leading higher education institutions (The Times Higher Education Supplement 2005).

After 36 years of existence, more than 100,000 students have graduated in the fields of Medicine and Health Sciences, Social Sciences and Humanities, Religion, Language Studies, as well as Science and Technology. Currently, there are 17,268 students registered at the undergraduate level and another 7,169 students at the postgraduate level with 1,200 teaching staff. UKM's challenge in this era of globalisation is to promote its national identity beyond the boundaries of Malaysia. UKM is an active player with respect to internationalisation and is currently

networking and linking with institutions of higher learning outside the country, not just in promoting itself as a place for the pursuit of knowledge and skills but also in expanding and widening the horizons of its students and staff in line with the aspirations of the nation to be developed by the Year 2020. The extent of contacts, partnership and networks is illustrated in Table 1 below. These partnership agreements act as a framework for the process of internationalisation in UKM.

Table 1: MOU Approved by UKM 2002-2005

Country/Continent	Number of MoUs
Asia	35
ASEAN	32
Australia & New Zealand	8
North and South Americas	4
Europe	14
Africa	2

UKM Strategic Plan

The Strategic Plan is like a beacon to the management in UKM in ensuring that we are travelling on the same path that will lead to academic excellence and sustainability. In essence, the UKM Strategic Plan has its mission to be a premier university. The overall strategy to achieve the mission lists 10 ensuing strategies in several areas deemed to be contributing components:

- To advance and nurture Bahasa Melayu.
- To emphasise and intensify research.
- To uplift the quality of academic programmes.
- To lead UKM to international level.
- To realise students excellence and potential.
- To equip UKM as a leading agency of ICT era.
- To develop and maintain human resources.
- To implement budgeting according to planning.
- To provide the required physical infrastructure and environment.
- To emplace a quality work culture based on indigenous values.

Source: Plan Strategik UKM: Perspektif 2006-2010.

Each strategy mentioned is supported by a list of activities and the internal implementers who are responsible for these activities. Each

activity supporting the objective is placed in a particular time frame, short term (2000-2005), intermediate (2006-2010) and long term (2011-2020). Performance indicators measure the success of each activity.

UKM's quest to acquire global recognition is highlighted in Strategy 4. The general objectives of the internationalisation strategy as formulated in the strategic plan document are:

- 1. To develop the infrastructure for international relations.
- 2. To establish academic collegial networking at national, regional and international levels
- 3. To develop networking focusing on teaching, research, consultancy and publication at regional and international level.
- 4. To identify UKM research centres as referral centres at international level
- 5. To heighten/expand UKM Student Affairs Department and alumni. Source: *Plan Strategik UKM: Perspektif 2006-2010*.

The above objectives list specific activities to ensure the smooth implementation of the internationalisation programme. The agency responsible for monitoring the implementation of the strategy is the Centre for Academic Advancement.

The government through its new ministry has initiated, using various resources, the process of internationalising universities. The government introduced policies and strategies to promote reforms in higher education system so that higher education in Malaysia attracts more students from overseas (The Ninth Malaysian Plan 2006-2010). In a relatively short period, UKM is impressed with the results of the internationalisation strategy. In January 2002, the Centre for Public and International Relations (PUSPA) was set up and the posts of its Director, Head of International Relation, Head of Chancellor's Foundation, Head of Public Relations, five officers and 20 supporting staff were established and the success rate of these posts is the most clear indication of the effective way UKM has implemented its internationalisation strategy. In addition, PUSPA's participation in the university co-operation for internationalisation project (UNCOFIN) is another effort in increasing the quality of service rendered in international relations in order to meet its aspiration to be "the National University with an International Reach".

UNCOFIN is funded by European Union-ASEAN University Network Programme and it involves the Amsterdam School of International Relations, De La Salle University, Philippines; Foreign Trade University, Vietnam; Maharishi Vedic University, Cambodia; SURINDRA Rajabhat University, Thailand; Universiti Sains Malaysia; University of Indonesia; University of Saarland, Germany; University of Social Science and Humanities, Vietnam; with the University of Alicante, Spain as the coordinator of the project. The main objective of the UNICOFIN project is to strengthen EU-ASEAN university co-operation through exchange of experience and training of International Relations Staff. The project aims to analyse successful case studies of European and ASEAN University International Offices (IROs), develop a strategy for exchanging knowhow, managerial skills as well as practices and approaches among the partners, propose management improvement measures and initiate strategic management processes at IRO level and establish a methodology for cooperation between the European and ASEAN higher education institutions that will facilitate exchanges (students, lecturers, researchers) and joint research projects. UKM participation in the UNCOFIN project has provided a platform for the enhancement of international relations office and training ground for the international relations officers to equip themselves with professional skills and knowledge in internationalisation activities.

Changing Patterns of Finance and Governance

One of the main challenges that UKM must face with respect to globalisation is to remain competitive. Funding for UKM, a public university, has traditionally been from the government. Low fees enjoyed by the students are the result of heavy subsidies from the government. In order to bring about greater accountability and productivity, the government of Malaysia has decided to make all public universities autonomous. Once fully autonomous, the university is expected to generate its own income with the government financing only a fraction of the total expenditure. All public universities have been given the target of achieving 25% self-sustenance by the year 2010. Since 15 March 1999, UKM has undergone the initial autonomy exercise whereby UKM is now governed by a Board. The process of decentralisation will be carried out in stages rather than abruptly, as the government has not set a concrete deadline as to when full autonomy will take place. UKM must now look into ways to raise its own income. UKM's initial response was to set up a private limited holding company known as UKM Holdings. In future, it is anticipated that each faculty will be required to find innovative ways of generating its own income. Students will expect better facilities and quality services. A fully corporatised UKM will also mean greater accountability, which will translate into an efficiently managed entity.

UKM recognises the enormous commercial potential of its human resource expertise and research activities to contribute to the finances of the university beyond its traditional funding base. Commercial generation of revenue involves harnessing the expertise and resources of UKM to provide specialist consultancy, research and technology transfer capabilities, executive and specialist training programmes for the community and industry. To this end, UKM Holdings Sdn Bhd. (UKMHSB) was incorporated under the Companies Act 1965 with an authorised capital of RM3 million on April 19, 2000. A board of directors who reports directly to the UKM Board of Directors governs the management of UKMHSB. The chairman of UKMHSB is the Vice-Chancellor of UKM. The company commenced its operations in January, 2001 to oversee the activities of the University's commercial subsidiaries namely UKM Kesihatan Sdn. Bhd. (Health), UKM Pakarunding Sdn. Bhd. (Consultancy), Centre for the Advancement of Education and Puri Pujangga UKM (University House). Strategic research-industry links and consultancy projects have been established by the various commercial subsidiaries to use research carried out at the university to generate products that will earn money for the university. In this case, education is treated as an engine of economic activity and international competitiveness. Yang (2004: 473) termed this a "academic capitalism". Within this policy, universities are very much governed by market ideologies and the corporate discourse of efficacy and effectiveness in response to global practices.

Academic Restructuring

Academic restructuring is about managing change (Gumport, 2000). This change in intellectual paradigm is to effect quality programmes. University experience worldwide reports that success in academic restructuring is most keenly felt in two areas:

- Increase in individual potential development.
- Effective delivery of programmes. Academic restructuring enables the efficient and cost-effective delivery of programmes, which had been previously mired in a bureaucratic structure. (Gumport, 2000).

Restructuring is essentially the re-assessment of the epistemology of knowledge. It entails members of an academic discipline to redefine their corpus, to decide the limits of change and from then on the manner of implementation. Pursuant to this, what would the structures of implementation be?

In UKM, academic restructuring has happened through the consolidation of academic programmes and the identification of niche programmes as well as niche research. Consolidation broke down barriers between faculties, enabling disciplines to interact in a better and interactive way. This manner of consolidation produced three new faculties from previously nine different faculties. The other consolidation is through internal restructuring, an exercise of reinvention. Faculties which have not been consolidated through merging of faculties need to consolidate themselves through disciplines and the total body of knowledge they wish to emulate.

Through restructuring, new programmes and new ways of delivery emerged. It is these niche programmes and niche research that will attract participation and interest to others at the international level. Niche research is housed in centres of excellence positioned to attract international partners such as the Institute of Malaysian and International Studies (IKMAS), Malaysia Genome Institute (MGI) and Institute for Environment and Development (LESTARI). Niche programmes too are results of especially constructed programmes designed as an on-off study arising out of specific agreements between UKM and other international partners. Examples of such programmes include Spanish, Japanese, International Politics and Strategy of European Countries.

UKM has embarked on its restructuring programme by successfully establishing the new streamlined Faculty of Science and Technology, Faculty of Social Sciences and Humanities and Faculty of Economics and Business. These three newly restructured faculties offer programmes that are multidisciplinary, transcending previously different departments. For the Faculty of Social Sciences and Humanities, innovative programmes, which are advanced for the region, are offered, for example, Language and ICT. The Faculty of Economics and Business views the restructuring exercise as an opportunity to position themselves as the leader in business related courses with the setting up of their Business Graduate School. It is anticipated that future students inclusive of international students will have a wider choice of courses to choose from thus enhancing UKM's academic programmes.

International Student Intake

Currently, there are 17,268 students registered at the undergraduate level and another 7,169 students at the postgraduate level. On the international scene, UKM is recognised as a centre of excellence in research, as 1027 foreign students from 30 different countries are currently registered for postgraduate degrees. Public universities such as UKM have no restrictions on the intake of foreign postgraduate students. For courses in key areas such as medicine, dentistry, pharmacy and engineering, the acceptance of foreign students is normally done through a government to government agreement. UKM is currently promoting its postgraduate programmes overseas, a strategy that augurs well for the university's status as a research university. The statistics on foreign students' intake into UKM are given in Table 2.

Table 2: Foreign Students Statistics in UKM, 2001-2006

Academic Session	Number of students			
	Undergraduate	Master	PhD	Total
2001/2002	60	208	189	497
2002/2003	55	372	279	706
2003/2004	61	430	322	813
2004/2005	78	496	439	1009
2005/2006	97	526	404	1027

Source: Resonance: UKM International Bulletin, Issue 11, April 2006

The trend clearly shows an increase in the enrolment of foreign students. The increase in the number of international students has important implications for language, social, accommodation and other support services. Providing support structures and services is always a challenge in internationalisation activities and UKM is committed to ensuring that international students are provided with adequate support services to maximise the potential benefit they receive from studying in UKM.

International Curriculum

The curriculum in UKM while having a very international input has to retain a certain percentage of national identity as indicated in our mission statement. Malaysia's perspective of a sustainable society has meant national unity is the overriding factor in the development of a nation.

Hence, the curricula should be a fusion between the requirements of globalising knowledge and the ability to produce graduates with a strong national culture and identity. Currently, the curricula are revised once every 5 years. The curriculum revision exercises are required to seek advice and comments from international external assessors, industries, private sectors, government agencies and professional bodies. The management is also actively arranging for activities to expose UKM graduates to as many international experiences as possible in tandem with the slogan "The national university with an international reach".

Many authors argue that internationalisation courses promote cognitive development and are mind-opening experiences (Fang, 1998; Paige, 2003; and Pick, 1998). According to Lerask (2001) and Cobbin & Richard (2002), ways to internalise are to infuse international content into courses, develop degree programmes of academic study with an international orientation, establish graduation requirements that are international and create supporting field-of-study programmes (academic minors) that have an international dimension. UKM has done a number of these things, two examples of which are provided below.

Foreign Language Minors. The School of Language Studies and Linguistics offers a number of foreign language programmes such as Spanish, German and Japanese. The foreign language minor has been successful in promoting internationalisation. Students who choose to study any language take the intercultural courses as well as participate in a study abroad programme. In addition, the school also offers components of international literature in its literature courses such as English, American and African Literature. Students are trained in comparative analysis, and learn how to assess cultural contexts in the conduct of their studies.

Studies of Malay World and Civilisation. The Institute of Malay World and Civilisation offers Masters and PhD programmes and annually, approximately one third of the entering students are international students (The Institute of the Malay World and Civilisation 2005 Report). The students are expected to have Malay language competency as well as cross cultural experience and expertise. The institute has extensive international research, consultation and teaching experience in all aspects of the Malay world and civilisation.

ICT

The computer has become an integral part of our daily lives. The importance of ICT is reflected in UKM's Strategic Plan as the sixth strategy. Currently UKM has put in place a very effective computer system for administrative purposes. There are various systems to manage personal data of UKM staff, financial systems and appraisal systems. The students have their own systems not just for record keeping, registration and evaluation purposes but also a system to handle students' complaints. The implementation of the sixth strategy is consolidated by an ICT policy, which has listed seven major projects that will be executed in stages: (1) Standardisation of the ICT capabilities for UKM denizen, (2) *E-learning* (3) One student one computer (4) E-Friends of the University (5) E-Intellectual property trove for the University (6) University's campus communication system, and (7) Computer assisted research network.

The most important aspect in the internationalisation of UKM is the information available to the community outside the campus. In the age of ICT, the Internet is a powerful tool for the effective dissemination of information. UKM has taken steps to consolidate its information especially those pertaining to research. A database containing the expertise of UKM's academics is easily accessible and may be updated personally by the respective individuals. Suffice to say that the modern technology systems and services will facilitate and speed up the creation of new contacts and enrich existing ones.

The information published on the website is easily accessible and updated regularly. The easy download of applications forms has also made the process of registering for UKM academic programmes relatively easy. In addition, the setting up of databases such as PADAT, the world's first database containing about 50,000 entries of works on the Malay world and civilisation has truly helped to internationalise the work carried out at the Institute of the Malay World and Civilisation. PADAT is an example of technology used to internationalise the Malay language to the world and the database is attracting researchers from all over the world to learn more about Malay language, culture and civilisation from UKM. To date, PADAT has been accessed by over 75,000, 000 visitors. Besides the Internet, the University places emphasis on corporate publications in the form of an international bulletin, Resonance as well as brochures to promote research and postgraduate programmes in UKM.

Research

A key thrust in the internationalisation programme of a university is its research activity (Taylor, 2004). Research may be viewed as the main product offered to the community outside the university especially the international community. Research may be translated into tangible products such as postgraduate programmes, publications, patents and awards. More importantly, research is the source for new knowledge ensuring the economic sustainability of a country. With respect to research, UKM has shown tremendous progress. For a start, the Malaysian government has identified UKM as one of its four research universities.

UKM has received an increasing number of research grants. During the period of 2001-2004, UKM's researchers have successfully secured grants worth about USD 50 million for various projects. The detailed breakdown of grants obtained from the Intensification of Research in Priority Areas, a scheme by the Ministry of Science, Technology and Innovation, as well as short-term grant schemes given by the Ministry of Higher Learning are presented in Table 3.

Table 3: Research Grants Obtained by UKM for 2001-2005

Source of Grants	Amount (USD)
Intensification of Research in Priorities Areas (IRPA)	37,800,000
Fundamental research	2,000,000
External Grants (UNESCO, Private Companies)	3,400,000
Europe-Aid (Europe Asia Link, AUNP)	700,000
Consultancy	6,300,000

Source: Resonance: UKM International Bulletin, Issue 11-April 2006

UKM researchers have also been awarded international grants from various sources such as Higher Education Link (British Council), German Academic Exchange Service (DAAD), Third World Academy of Sciences (TWAS), Japan Society for the Promotion of Science (JSPS), Asia Public Intellectual Programme (API), Southeast Asian Fellowship Programme (SEAF) and Europe Asia-Link Programme (EU). The research projects are conducted in both the sciences and humanities faculties as well as in the research institutes.

Quality Assurance and Mutual Recognition of Qualifications

The Centre for Academic Advancement is the agency responsible for carrying out activities pertaining to quality assurance issues. The key elements connected to quality assurance are international bench marking and accreditation from international professional bodies. With respect to international accreditation by professional bodies, the Chemical Engineering programme was accredited by the Institute of Chemical Engineers in the United Kingdom. Thus, chemical engineering graduates from UKM may practice in the UK without having to seek permission to do so from the professional engineering bodies. All degrees from the Faculty of Engineering in UKM are accredited by the Board of Engineers Malaysia and The Washington Accord. Members of the accord give mutual recognition to one another, thus ensuring UKM engineering graduates of easier employment opportunities in the member countries. The Biomedical Sciences programme in the Faculty of Allied Health Sciences has received international accreditation from the Institute of Biomedical Science (IBMS) in United Kingdom since 1997. The accountancy programme in UKM was given partial accreditation by ACCA and CIMA for some of the courses. International recognition will ensure that our graduates are better equipped to seek employment anywhere in the world.

Besides the professional recognition, UKM has successfully attained ISO 9001:2000 accreditation from SIRIM QAS for its quality system involving examination at the undergraduate level. The scope of the quality system was recently expanded to include teaching and learning processes. UKM has also attained ISO 9001:2000 certification for postgraduate programmes and research activities. It is anticipated these quality accreditation exercises will bring greater efficiency and productivity to teaching and research activities.

Mobility Programmes

Underpinning our strategy for internationalisation is a crucial recognition of the importance of human resources in the delivery of international mission. Internationalisation will only be effective when it becomes a mode of thinking and action which suffuses all section of the university. As such, UKM emphasises the need to prepare student and staff for living and

working in a context of global interdependence. The growth of international experience among staff and students are manifested in various ways.

The exchange programmes for staff include both academic and administrative sectors. Among the mobility programmes that are currently available in UKM for academic staff are overseas training for master's and doctorate degrees, Sabbatical leave, post-doctorate training, foreign lectureship and foreign consultation. For the administrative staff, short working stints for up to two months have been organised. UKM sabbatical policy has been used extensively to support faculty research and study abroad in recent years. Staff have taken sabbatical leave in Australia, New Zealand, Germany, UK, Japan, US and elsewhere. Overall, UKM staff has had very significant opportunities for development in the international dimension and there is institutional and faculty commitment in programmatic terms to continue it in the future.

There are exchange programmes for both undergraduate and postgraduate students. The postgraduate students exchange programme was set up by the Department of International Relations, UKM since 2002. So far, 17 students have benefited from the programme, which entitles a student to spend up to 3 months to carry out research in a foreign laboratory. Table 4 below provides the number of students and university/institutions involved in postgraduate student mobility programmes.

Table 4: Postgraduate Student Mobility Programmes 2002-2004

Year	No. of Students	University/Institution
2002	2	University of Canterbury, New Zealand
2003	9	Australian National University, Canberra, Australia University of Cape Town, South Africa University of College Cork, Ireland Universitaet Maastricht, The Netherlands Institut Teknologi Bandung, Indonesia Hussian Ebrahim Jamal (HEJ) Research Institute of Chemistry, University of Karachi, Pakistan
2004	6	Hussian Ebrahim Jamal (HEJ) Research Institute of Chemistry, University of Karachi, Pakistan Stockholm Universiteit, Sweden Institut Teknologi Bandung, Indonesia University of Cambridge, United Kingdom University of Reading, United Kingdom The Royal Botanic Gardens, Kew, United Kingdom

Source: Resonance: UKM International Bulletin, Issue 8-July 2005

Currently, at the undergraduate level, UKM has exchange programmes with Sun Moon University, Beijing Foreign Studies Universities (BFSU), and University of Duisburg Essen in Germany (UDE). UDE and UKM offer double degree programme for Electrical & Electronic Engineering and Communication & Computer Engineering programmes which allow a student to undertake the first two years of study in UKM and 18 months in Germany. In addition, study tours abroad are organised to various destinations by the Centre for Students' Advancement which acts as the secretariat for internationalisation activities for undergraduate students. The Co-curriculum Centre in UKM has also started a new programme where students may spend up to 6 weeks in a foreign country studying a specific matter unique to the country. This is supported by the establishment of a visiting academic lecturer programme to expose students to different international cultures and approaches to learning. It is clear that UKM is constantly devising new programmes to include the dimension of internationalisation into its students' activities for enhancing student mobility.

Challenges to Internationalisation

UKM has established a comprehensive set of goals for internationalisation, including its strategic plan for internationalisation. While major strides have been made in the last five years since the strategic plan was issued, significant challenges remain. These include:

- 1. improving the international coverage in the curriculum so that graduates will possess the knowledge they will require for successful careers in the 21st century.
- 2. involving a broader range of university staff in the process so that the goal of thoroughly internationalising the educational process in UKM becomes a reality.
- 3. finding resources to support special projects and new initiatives in an era of declining government spending for universities.
- 4. strengthening research collaboration and expanding academic collaboration and exchange programmes with best educational and research institutions in the world.
- 5. building stable and effective networks to facilitate recruitment of high quality international students & staff, and effective support services to retain them once they have been recruited.

Conclusion

Internationalisation is one of UKM's priority areas. International strategy is a key way of maintaining a high level of teaching and research and of preserving the international competitiveness. Through internationalisation, UKM fulfils its responsibilities to educate students to serve the society by promoting peaceful, sustainable development in the world.

Success in internationalisation activities is not easy to measure and it is an ongoing process (Knight, 2001). In UKM, international activities are manifested especially through international cooperation in research, teaching and student-staff mobility programmes. Our report indicates that UKM is among the few government universities in Malaysia to have internationalised to the breadth. At the same time, we are aware of the challenges and suggestions, always in constructive spirit, for the purpose of facilitating the shared goal of improvement.

Thus, if internationalisation of UKM is to provide real benefit to the UKM community and the Malaysian society at large, there is an ongoing need to redefine goals and objectives, to implement strategies for their achievement and to gauge the quality of the outcomes. In this light, the key impact of internationalisation assessment has been at the level of university planning. As the volume of activities are expected to increase, and more formalised ways of communication, co-ordination, decision making should be continually improved, we have attempted to check on our achievement thus far through self assessment questionnaires. The self-assessment project will help UKM to become aware of our strengths and weaknesses, of our opportunities and challenges to internationalisation and most importantly, based on our analysis of existing activities and programmes, to design other international activities and develop new international priorities and practices. It is our mission to be one of the motors of internationalisation in Malaysia and in South East Asia and to create a clearer interface between internationalisation policy and practice.

References

American Council on Education (1999). Educating Americans for a world in flux: Ten ground rules for internationalising higher education. Washington, D.C.: American Council on Education.

- Bartell, M. (2003). Internationalisation of universities: A university culture-based framework. *Higher Education*, 45, 43-70.
- Cobbin, P.E and E. N. Lee Richard (2002). A micro-level approach to internationalising the accounting curriculum. *Journal of Studies in International Education*, 6/1, 59-77.
- Cogan, J. J. (1998). Internationalisation through networking and curricular infusion. In J.A. Mestenhauser & B.J Ellingboe (Eds). *Reforming the Higher Education Curriculum: Internationalising the Campus* (pp. 106-117). Phoenix, AZ: American Council on Education & Oryx.
- De Wit, H. (1995). Strategies for internationalisation of higher education. A comparative study of Australia, Canada, Europe and United States of America. Amsterdam: EAIE.
- Ebuchi, O. (1999). The internationalisation of the university. A view from the Japanese perspectives. Hiroshima University Research Institute for Higher Education.
- Ellingboe, B. J. (1998). Divisional strategies to internationalise a campus portrait: Results, resistance and recommendations from a case study at US universities. In J.A. Mestenhauser & B.J Ellingboe (Eds). *Reforming the higher education curriculum: Internationalising the campus* (pp. 106-117). Phoenix, AZ: American Council on Education & Oryx.
- Fang, C. V. (1998). Mind opening through music: An internationalised music curriculum. In J.A. Mestenhauser & B.J Ellingboe (Eds). *Reforming* the higher education curriculum: Internationalising the campus (pp. 106-117). Phoenix, AZ: American Council on Education & Oryx.
- Jarvis, P. (2001). *Universities and corporate universities. The higher learning industry in global society.* Stirling, VA: Stylus.
- Knight, J. (1994). *Internationalisation: Elements and checkpoints*. Ottawa: Canadian Bureau for International Education.

- Knight, J. (2001). Monitoring the quality and progress of internationalisation. *Journal of Studies in International Education*, 5, 228-243.
- Knight, J. (2002). *Trade in higher education: The implication of GATS*. London, Observatory of Borderless Higher Education. (www.obhe.ac.uk, accessed July 2005).
- Knight, J. & de Wit (1997). *Internationalisation of higher education in Asian Pacific countries*. Amsterdam: EAIE.
- Leask, B. (2001). Bridging the gap: Internationalising university curricula. *Journal of Studies in International Education*, 5/2, 100-115.
- Mestenhauser, J.A., & Ellingboe, B. J. (Eds.) (1998). *Reforming the higher education curriculum: Internationalising the campus* (106-117). Phoenix, AZ: American Council on Education & Oryx.
- Metcalf, M.F. (1998). Teaching about cognition and cognitive development: How to internalise the topic. In J.A. Mestenhauser & B.J Ellingboe (Eds). *Reforming the higher education curriculum: Internationalising the campus* (pp. 106-117). Phoenix, AZ: American Council on Education & Oryx.
- Paige, M. R. (2003). The American case: The University of Minnesota. *Journal of Studies in International Education*, 7/1, 52-63.
- Pick, H. L. (1998). Teaching about cognition and cognitive development: How to internationalise the topic. In J.A. Mestenhauser & B.J Ellingboe (Eds). *Reforming the higher education curriculum: Internationalising the campus* (pp. 106-117). Phoenix, AZ: American Council on Education & Oryx.
- Plan Strategik UKM: Perspektif 2006-2010. Bangi: UKM.
- Resonance: UKM International Bulletin, Issue 8-July 2005. Centre for Public and International Relations (PUSPA), Bangi: UKM.
- Resonance: UKM International Bulletin, Issue 11-April 2006. Centre for Public and International Relations (PUSPA), Bangi: UKM.

- Scott, P. (1998). *The globalisation of higher education*. Buckingham: Open University Press.
- Taylor, J. (2004). Toward a strategy for internationalisation: Lessons and practice from four universities. *Journal of Studies in International Education*, 8/2, 149-171.
- The Institute of the Malay World and Civilisation 2005 Report. Bangi: UKM.
- The International Association of Universities (2003). Internationalisation of Higher education: Trends and Developments since 1998. UNESCO: Paris.
- The Times Higher Education Supplement 2005. World University Ranking. Retrieved November 30, 2005 from http://www.Education/times_world_ranking_2005.
- Welch, A. (2002). Going global? Internationalising Australia universities in a time of global crisis. *Comparative Education Review*, 46/4, 433-471.
- Yang, R. (2004). Openness and reform as dynamics for development: A case study of internationalisation at South China University of Technology. *Higher Education*, 47, 473-500.