Library and information science education in Malaysia: past, present and prospect

Mohd Sharif Mohd Saad
Ahmad Nadzri Mohamad
Fuziah Mohd Nadzar

RESUMEN

Este documento recoge los adelantos en los estudios de bibliotecología y ciencias de la información en Malasia durante el pasado y el presente y analiza sus perspectivas para el futuro cercano. Como elementos clave de la sociedad basada en el conocimiento que Malasia aspira a construir para el año 2020, los estudios de bibliotecología y ciencias de la información son un componente crítico de esta ecuación, es decir, en la formación de profesionales de la información altamente calificados, competentes y conocedores con el fin de ayudar y apoyar en las necesidades de información de los distintos sectores de la sociedad. En el se destacan los antecedentes históricos del desarrollo de la facultad de bibliotecología en Malasia, y el papel que desempeñan tanto el Grupo de Bibliotecología de Malasia y la Asociación de Bibliotecarios de Malasia. También se describen las distintas universidades que actualmente ofrecen programas de pregrado y postgrado. Se comparan los requisitos para ingresar y graduarse de los programas de postgrado que ofrecen las tres instituciones académicas. La diversidad y la similitud que existen en las diferentes facultades que brindan estudios en bibliotecología y ciencias de la información muestran las fortalezas y los enfoques multidisciplinarios adoptados por cada facultad en sus ofertas de programas. Ciertamente los estudios de bibliotecología y ciencias de la información se han convertido en un desafío creciente en el contexto de las tecnologías emergentes en el campo de la información y de la comunicación. Cada facultad debe esforzarse constantemente en el diseño y revisión de sus planes de estudios con vistas a satisfacer las actuales necesidades de información de la sociedad. Los estudios de bibliotecología y ciencias de la información en Malasia deben evolucionar continuamente a la par de las necesidades cambiantes de la profesión y la industria de la información a fin de que la profesión de los bibliotecarios y especialistas en información mantenga su importancia en el futuro.

Palabras clave: Estudios de bibliotecología y ciencias de la información; programas de estudio de bibliotecología y ciencias de la información (LIS); Malasia; educación e instrucción; profesionales de la información; bibliotecarios

ABSTRACT

This paper covers the developments of Library and Information Studies education in Malaysia from the past, the present and considers its prospect in the near future. As key institutions in the knowledge-based society that Malaysia aspires to achieve by 2020, library and information education is a critical component of that equation, i.e. in producing competent, knowledgeable, highly skilled information professionals to assist and provide support for various information needs of the different sections of society. Highlights the historical beginnings of the library school development in Malaysia, and the role played by both the Malayan Library Group and the Librarians Association of Malaysia. Describes the various universities that are currently offering undergraduate and postgraduate level programs. Compares the entry and graduate requirements of the postgraduate level programs offered by three academic institutions. The diversity and commonality that exists in the different faculties providing library and information studies education exhibits the strengths and the multifarious approaches adopted by each faculty in their program offerings. Certainly LIS has become increasingly challenging in the context of emerging information communication technologies. Each faculty must strive to consistently design and review their curricula to meet with the current information needs of the society. Library and information studies education in Malaysia must continuously evolve with the changing needs of the profession and the information industry in order for the library and information profession to remain relevant in the future.

Keywords: Library and information studies education; LIS Programs; Malaysia; education and training; information professionals; librarians

Introducción

Tracing back library and information studies education in Malaysia involves a profound comprehension on the developmental stages of the nation. From agriculture-based economy, Malaysia prospers in various broad areas such as infrastructure and economic developments. Various reforms and strategies are being planned and implemented to achieve Vision 2020, amongst those, the Government Transformation Program (GTP), and the Economic Transformation Program (ETP) within the series of the 5-year Malaysia Plans. Gearing the country towards a high-income nation requires a concerted effort from various organisations including libraries and information industries. In order to support the national agenda in producing knowledge manpower and promoting a knowledge society, information professionals, librarians in particular, need to be trained with contemporary skills and technologies. Hence, curricular design in LIS merits a constant review to meet the ever changing demands of the profession and society (N.N. Edzan & Abrizah Abdullah, 2003).

Keeping pace with national needs and societal changes has influenced library and information studies education since its inception in the 1950's. These changes influence the profession's competencies and the curricular design of library schools in academic institutions over time. From a single organisation providing short courses to librarians in the past, LIS been established in several universities at the present time. With the national agenda in mind, LIS is the catalyst to produce competent and academically qualified librarians in a knowledge-based society. This paper covers the developments of Library and Information Studies education from the past, the present and its prospect in the near future. Certainly LIS has become increasingly challenging in the context of emerging information communication technologies.

Library and information sectors in Malaysia

The National Higher Education Strategic Plan was initiated with a vision to promote Malaysia as a preferred educational hub. As important producers of knowledge, universities have become key institutions in the knowledge-based economy (Reichert 2006). Hence, a vast number of universities and colleges were established to provide professional courses for local and international students. For instance, a total of 80,750 international students from almost 170 countries enrolled in Malaysian universities and colleges for the 2008/2009 session (Higher Education of Malaysia, 2010). The library and information services sector in Malaysia is on the rise to support the increasing number of educational, research and knowledge-based organisations. In primary and secondary schools, resource centres are of varying sizes and strengths in terms of collections and services (Mohd Sharif & Norma, 2005). These resource centres aid in the teaching and learning processes via providing relevant resources to students. According to statistics from Perpustakaan Negara Malaysia (2010)(National Library of Malaysia), the breakdown of libraries and information centres are as follows:

Table 1. Number of libraries in Malaysia.

Types of libraries	Number of libraries
National Library	1
State Public Librarie (regional, branch, & mobile libraries)	319
District libraries	1095
Academic Libraries	366
Special Libraries (Government Agencies)	505
Special Libraries (Private Sector)	174
School Libraries/Resource Centres (Primary & Secondary Schools)	9922
Total	12 382

The largest numbers of libraries are school resource centres. Schools in Malaysia, both primary and secondary, are equipped with libraries (school resource centres) to support teaching and learning activities. However, these resource centres vary in size, collections and services. A teacher librarian is designated to each of the resource centre. The resource centre is considered as a catalyst for the nurturing of reading habits, information literacy and life-long learning. The public library services are provided by the state public library corporations. Each public library corporation has a network of libraries at various districts, municipalities, and villages, as well as the mobile libraries. Several city authorities such as Petaling Jaya and Subang Jaya in the state of Selangor, and Ipoh in state of Perak, have established their own library services. The impact of the growing number of libraries and information centres in Malaysia has a positive outcome on the required manpower in these institutions. To date, a total of 1,439 professional librarians are currently employed in various libraries nationwide (Library Development & Research, 2010). The types of libraries and professional positions are as follows:

Table 2. Management and professional positions in Malaysia: includes librarians, executives, library officers.

Types of libraries	Management & Professionals
National Library	136
Special Libraries (Government libraries)	175
Private Libraries	38
State Libraries	127
Rural Libraries	-
Public & Private colleges	863
Total	1339

History of library and information studies education

Educational needs and reforms of Library and Information Studies in Malaysia have evolved for the past few decades to blend with the national aspirations, needs and circumstances. Prior to independence, the National Education System was inherited from the British and a major restructure on education and industrial manpower fulfillment became the government agenda.

The beginning of library and information science education is always associated with the formation of the Malaya Library Group (MLG) in 1955 which is at present known as the Librarians Association of Malaysia (PPM) (Lim, 1970). Shortly after Malaya gained her independence in 1957, the association initiated to promote the profession, mainly in the areas of professional training, education, and qualification of librarians (Wijasuriya, Lim & Nadarajah, 1975). In the early years, MLG organised library and information studies classes solely to enhance the quality of library services in Malaya (Kaba, 2001; N.N. Edzan & Abrizah Abdullah, 2003). Grants from the Asia Foundation and Smith-Mundt enabled the conduct of many short courses despite the unavailability of a library school at that time (Fuziah Mohd Nadzar, Indahsah Hj Sidek & Mohd Sharif Mohd Saad, 1993). Classes in librarianship organised in the 1960s then were short vacation courses for teacher librarians and formal courses for students sitting for the United Kingdom Library Association examinations. The British ALA courses were at that time offered by Institut Teknologi MARA (ITM) from 1968 to 1971. Candidates need not be in the United Kingdom to pursue a professional library qualification.

However, when the Library Association of United Kingdom (UK) discontinued offering the external library qualifications to countries outside the United Kingdom, the School of Library Science, ITM, consequently established a 3-year Diploma in Library Science program (equivalent to a General Degree qualification). The priority at that point of time was to produce undergraduate qualified professionals. At its initial phase, the librarianship program was replicated from the ALA syllabus, and was later redesigned and embedded with local contents (Norma Abu Seman & Mohd Sharif Mohd Saad, 2005). In 1972, ITM started its Post Graduate Diploma in Library Science to cater for university graduates who wish to gain employment in library services. University of Malaya officially launched the Master of Library and Information Science program (MLIS) during their 1987/1988 session under the auspices of the Institute of Advanced Studies. However, it was suspended the following year, but was then revived in November 1994 and hosted at the Faculty of Computer Science and Information Technology.

Without omitting the contributions made by Teacher Training Colleges and State Education Departments throughout the country, the library science education program was offered since the late 1970s to train teacher-librarians to manage school resource centres. Institut Perguruan Darul Aman (IPDA) in Kedah which represented the Teacher Training Colleges had developed a one-year certificate-level course for the management of school resource centres which started in 1990. This came about after the joint program of the Specialist Teachers Course in Library Science and the Specialist Teachers Course in Educational Technology was terminated in 1989 (Fuziah Mohd Nadzar, Indahsah Hj Sidek & Mohd Sharif Mohd Saad, 1993).

Over the years, a number of universities offered LIS courses at both the undergraduate and postgraduate levels. The International Islamic University (IIUM) started offering its Masters in Library Science and Information Science program (MLIS) since 1992. The Department of Library and Information Science is at the Kulliyah of Information, Communication and Technology (ICT). Universiti Teknologi MARA started its Masters of Science in Information Management in 1997. Subsequently, this was followed by the Master in Library Science program (MLS) in 2006. In 2003, the Islamic Science University of Malaysia (USIM) commenced the Bachelor of Sunnah Studies with Information Management. In recent years, University of Selangor (UNISEL) established its Diploma in Library Science program in 1996, and in September 2011 they established the Bachelor in Library Science program. A milestone of the historical development of library and information studies in Malaysia is depicted in table 3 below.

Table 3. Milestones in the Development of Library and Information Studies Programs in Malaysia.

Year	Milestone
1960	W. J. Plume, University of Malaya (UM) Librarian submitted a proposal to UM authorities to include a library school in the second phase of the university library programs. It was supported by Persatuan Perpustakaan Malaysia (PPM)
1960s	PPM conducted part time classes to prepare candidates for the Library Association Examination , United Kingdom
1965	PPM sent a memorandum to the UM authorities urging for the establishment of a library school
1967	The Higher Education Planning Committee (HEPC) report revitalized the establishment of the library school
1968	Institut Teknologi MARA (ITM), established a Department of Library Science under the School of Public Administration and Law. It conducted a full time program in Librarianship preparing students for the British Associate of the Library Association (ALA, UK)
1969	At the International Council of Archives (SARBICA) Conference in Jakarta, both SARBICA and PPM agreed to the establishment of a post graduate school of Librarianship at UM
1970	ITM established the School of Library Science; changed its name to "School of Library and Information Science" in 1979; it was once again changed to "Faculty of Information Studies" in 1997; and the current name "Faculty of Information Management" has been in use since 2005
1972	A memorandum was sent to the National Library Committee (NLC) for the establishment of the school at UM

Cont. ➡

Cont.-**Table 3.** Milestones in the Development of Library and Information Studies Programs in Malaysia.

Year	Milestone
1972	With the end of the external ALA program, ITM introduced a 3-year Diploma in Library Science program, with local contents planned into the curriculum
1972	ITM introduced a 1-year Post Graduate Diploma in Library Science program
1986	The first National manpower survey of libraries and information services in Malaysia was conducted by ITM and UNESCO
1987	The Masters in Library and Information Science program (MLIS) was offered by UM for the 1987/1988 session. However, the course was suspended the following year
1991	ITM's 3-year Diploma in Library Science (equivalent to the General Degree) was upgraded to a 4-year Honours Degree program; and in 1999, ITM became Universiti Teknologi MARA (UiTM)
1992	The International Islamic University , Malaysia (IIUM) introduced the MLIS program at the Department of Library and Information Science, Kulliyah of ICT
1994	The MLIS program at UM was revived and housed at the Faculty of Computer Science and Information Technology
1996	University Selangor (UNISEL) launched the Diploma in Library Science program
1997	UiTM's Bachelor in Information Studies (Hons.) program branched out into 4 specializations: a. Library and Information Management b. Information Systems Management c. Records Management d. Resource Centre Management
1997	UiTM started the MSc. in Information Management program
1999	UiTM started the PhD in Information Management program
1999	UiTM started the Diploma in Information Management program
1999	Universiti Sains Islam Malaysia (USIM) started a Bachelor degree in Sunnah Studies with Information Management
2011	UNISEL started the Bachelor in Library Science program
2003	UiTM stated the Master of Knowledge Management program
2004	A study on human resources need for Library and Information Services in Malaysia (Zaiton et.al) commission by The National Library of Malaysia
2006	UiTM started the Master in Library Science program

Current library and information studies education

The field of librarianship has changed significantly as a result of technological changes and social developments, as well as other factors that had affected the provision of information and information use. Such changes were accommodated and resulted in the Library and Information Studies programs being aligned with the market demands. Apart from the inclusion of the ICT elements, many new areas such as marketing, knowledge management, taxonomies, etc., have been blended into the programs. Overall the training of Library and Information Studies professionals in Malaysia are being offered by five universities, namely Universiti Teknologi MARA University of Malaya, International Islamic University, Islamic Science University of Malaysia and University of Selangor. Malaysia is moving towards a Knowledge-based economy, it has to formulate policies for the development of its human resources to the fullest potential, talent, expertise and energies in all sectors including librarians and library personnel (Ismail, 2006). In addition, the programs are aimed at producing professionals for the library and information market and to cater to the manpower needs of libraries, information centres, record centres, archives and information systems departments (Mohd Sharif & Norma, 2005). Table 4 identifies the programs conducted by UiTM, IIUM, UM, UNISEL and USIM. These programs are conducted on full-time and part-time basis as well as the flexible learning mode (E-learning). This is the opportunity provided by the universities for librarians who want to continue learning and gain current knowledge in their areas of needs. Comparatively, these programs are offered at two levels, i.e. the postgraduate and undergraduate levels. The postgraduate level programs include Master and Doctoral degrees and the undergraduate level programs include bachelor degree and diploma, as detailed in Table 4.

Comparison between master in library and information science programs

Keeping pace with the national and international developments, universities in Malaysia have been conducting regular curriculum reviews resulting in the integration of library and information studies components into the curriculum. The curriculum at the postgraduate and undergraduate levels are designed to train students with the skills and competencies in library management, ICT, information literacy, information storage and processing and retrieval (manual and computerized techniques), through a variety of teaching modes and assessments throughout the duration of the programs. According to Mohd Sharif and Norma (2005), the curriculum at the master's degree level is designed to train bachelor degree holders from different disciplines to acquire advanced knowledge of library and information services.

Table 4. Library and Information Studies Programs in Malaysia.

Level of Programs	UiTM Faculty of Information Management	IIUM Department of Library and Information Science	UM Department of Library & Information Science	UNISEL Department of Library Science	UNISEL Department of Library Science
Postgraduate	A. Doctor of Philosophy (Info. Mgt)	A. Doctor of Philosophy	A. Doctor of Philosophy		
	B. Master of Library Science	B. Master of Library and Information Science	B. Master of Library and Information Science		
	C. Msc. Information Management				
	D. Master Knowledge Management				
Undergraduate	A. Bsc. (Hons). (Lib. & Info. Mgt.)				
	B. Bsc. (Hons). (Info. Syst Mgt.)			A. Bachelor in Library Science	Bachelor of Sunnah Studies & Info. Mgt
	C. Bsc. (Hons) Records Mgt.				
	D. Bsc. (Hons) Resource Ctr. Mgt)				
	E. Diploma in Information Management			B. Diploma in Library Science	

University of Malaya has revised its MLIS coursework program to cater for a higher research activity in tandem with its status as a research university. The students in the masters programs at these universities come from various academic backgrounds, such as law, engineering, psychology, sciences, computer science, social science, arts and humanities, and Islamic studies. The master programs do not only cater for Malaysians. Over the years, students from Brunei Darussalam; China; Sri Lanka; Indonesia; Iran; India; and several countries in the Middle East and Africa, have enrolled into these programs and graduated from these universities.

The characteristics of the postgraduate and undergraduate programs are tabulated as in Table 5 above:

1. The total credit hours required for graduation is 40.

2. The minimum duration for full time students is 3 semesters.

3. Course structures are varied, some with course work; with independent study or self directed learning and partial thesis/dissertation; or full time research.

4. Content of the curriculum include core areas, such as management; information storage and retrieval; information services; user needs and information seeking behavior and ICT.

5. Research skills embedded in the curriculum.

Table 5. Comparison of Master in Library and Information Studies among Malaysian Universities.

ENTRY REQUIREMENT		
UiTM **Faculty of Information Management** **Master in Library Science**	**IIUM Department of Library & Information Science** **Master inLibrary & Information Science**	**UM Department of Library & Information Science** **Master inLibrary & Information Science**
Track 1 **(Library & Information Management Background)** 1. Bachelor's Degree (CGPA 2.75 and above) in Library / Information Management Bachelor's Degree (CGPA below 2.75) in Library / Information Management with at least 3 years working experience **Track 2** **(Non-Library & Information Management Background)** 2. Bachelor's Degree (CGPA 2.75 and above)	1. Bachelor's Degree (2nd Class Upper and above) or equivalent 2. A comparable degree in Library & Information Studies 3. English language proficiency at advanced level. TOEFL 550 / IELTS 6	1. Bachelor's Degree (Honours) or 2. A comparable degree in Library & Information Studies or 3. A comparable degree with working experience of at least 3 years in a library/information centre 4. Foreign students if English is not the medium of instruction. TOEFL 550 / IELTS 5.55 5. Any other qualification approved by the UM Senate
GRADUATION REQUIREMENTS		
UiTM Faculty of Information Management	**IIUM Department of Library & Information Science**	**UM Department of Library & Information Science**
Track 1 Complete 40 credits consisting of 21 credit hours (core), 3 credit hours (elective) and 12 credit hours (thesis) **Track 2** Complete 40 credits consisting of 24 credit hours (core) and 12 credit hours (thesis) **Note:** Candidates that do not want to do a 12-credit hour thesis may opt for 6 credit hours (independent study) and 6 credit hours (course work)	Complete 40 credit hours consisting of: a. By Coursework 36 credit hours + 4 credit hours practicum b. Course work + Dissertation- 28 credit hours courses + 12 credit hours dissertation c. Full Disertation 2 research courses and full dissertation	Complete 40 credit hours consisting of: a. oursework 5 courses & Partial Dissertation b. Full Disertation 2 research courses and full dissertation

Conclusion

Library and information services are changing in many areas such as management, resources and technologies (Mohd Sharif & Norma, 2005). LIS schools need to equip students with new skills in order to be employed in libraries and beyond. From a single organisation providing short courses to librarians in the past, LIS has now been established in several universities at the present time. Professional courses are offered at both the undergraduate and postgraduate levels. In the coming years, LIS education will continue to prepare students to become information professionals. The LIS curriculum is expanding into the state-of-the-art areas, such as information management, knowledge management and digital information services. New subject areas will be introduced mainly on technology-based concepts and components, such as Web 3.0, Resource Description and Access (RDA) and Fundamental Requirements for Bibliographic Records (FRBR). The library, as it always is, will continue in its role as a dynamic and responsive information provider.

Library and information studies education in Malaysia began with a modest aim to fulfill library positions at the initial phase. Then, the discipline grew and professional courses began to be offered by the universities. Throughout its development, LIS education is driven by governmental policies, technological changes and societal needs. In this context, it is imperative that library schools to cooperate with the industry and professional associations, to identify the industrial requirements and the needs of the

nation, thus continue to prepare graduates who are market-ready. Embracing the national agenda in transforming Malaysia into a developed country, LIS education is expected to continue evolve and advance with development of the nation beyond the year 2020. As in many Asian countries, globalization and networking has required LIS education in Malaysia to keep up with the trends world-wide as a means to respond to the changing information environment and to improve the quality of the training and continuous education programs of professionally qualified information workers of the future.

References

Abdoulaye, K. (2004). State of Library and Information Science Education in Malaysia. Journal of Education for Library and Information Science, 45(1), 1-14.

Conference of Directors of National Libraries, (2010). National Library of Malaysia: Annual Report to CDNL, 2010. Retrieved March 28, 2012 from: http://www.cdnl.info/2010/CDNL_2010_-_country_report_MALAYSIA.pdf

Conference of Directors of National Libraries, (2002). National Library of Malaysia: Annual Report to CDNL, 2001 – 2002. Retrieved March 28, 2012 from http://www.cdnl.info/2002/malaysia.pdf

Fuziah Mohd Nadzar, Indahsah Hj Sidek, & Mohd Sharif Mohd Saad, (1993). Education and Training of Library and Information Personnel in Malaysia: A Status Report. Bangkok: UNESCO (Project Contract No. 848.952.2)

Higher Education of Malaysia, (2007). Pelan Strategik Pengajian Tinggi Negara (PSPTN). Retrieved April 5, 2012, from http://www.mohe.gov.my/portal/info-kementerian-pengajian-tinggi/pelan-strategik.html

Higher Education of Malaysia, (2010). Statistics of Higher Education of Malaysia. Putrajaya: Higher Education of Malaysia.

International Islamic University Malaysia. Kulliyah of ICT. [n.d.]. Department of Library and Information Science (DLIS). Retrieved March 30, 2012, from http://www.iium.edu.my/kict/about/departments/dlis

Ismail Norillah, (2006). An exploratory study of upper secondary school students perception towards librarianship as a career. (Unpublished master's dissertation), University Malaya, Kuala Lumpur.

Knowledge-based economy master plan, (2002). Retrieved April 9, 2012, from http://unpan1.un.org/intradoc/groups/public/documents/APCITY/UNPAN013977.pdf

Lim, E. H.T., (1970). Libraries in West Malaysia and Singapore: a short history. Kuala Lumpur: University of Malaya Library.

Mohd Sharif Mohd Saad & Norma Abu Seman, (2005). Development of library and information science education in Malaysia in meeting the national information manpower needs. In Celebrating 50 years of Librarianship in Malaysia and Singapore. Jointly published by Librarians Association of Malaysia and Library Association of Singapore.

N.N. Edzan & Abrizah Abdullah, (2003). Looking back: the Master in Library and Information Science Program at the University of Malaya. Malaysian Journal of Library and Information Science, 8(1): 1-18.

Nadharajah, R ., (1975). Evaluation of graduate library education in and from the South East Asian countries. In Education and training for librarians in South East Asia: Proceedings of the 2nd of South East Asian Librarians, University of the Philippines, 1973. University of the Philippines Library (97-108).

Perpustakaan Negara Malaysia, (2010). Retrieved April 9, 2012, from http://www.pnm.gov.my/

Perpustakaan Negara Malaysia, (2010). Perangkaan Perpustakaan di Malaysia 2010. Kuala Lumpur: Perpustakaan Negara Malaysia.

Reichert, S., (2006). The rise of knowledge regions: Emerging opportunities and challenges for universities. Brussels: EUA Publications.

University of Malaya. Faculty of Computer Science and Information Technology, (2011). Department of Library and Information Science. Retrieved March 30, 2012, from http://www.fsktm.um.edu.my/dep_lis.php

University Teknologi MARA. Faculty of Information Management, (2005-2012). Retrieved March 30, 2012, from http://fim.uitm.edu.my/

Wan Zahid Noordin, (2008). Development of Education in Malaysia: A Strategy Based Analysis of Education Development in Malaysia. Paper presented at the African Leaders in Education and Training for Sustained Growth (LETSGA), Singapore.

Wijasuriya, D.E.K., Edward L.H.T & Nadarajah, R., (1975). The barefoot librarian: library developments in Southeast Asia with special reference to Malaysia. London: Bingley.

Zaiton Osman, Diljit Singh, Tengku Noraida Tuanku Abdul Rahman, Paauziah Mohd, & Kiran Kaur, (2004). Laporan kajian keperluan sumber manusia dalam bidang perpustakaan dan perkhidmatan maklumat di Malaysia. Kuala Lumpur: Perpustakaan Negara Malaysia.

Dr.C. Mohd Sharif Mohd Saad
Universiti Teknologi Mara
Country: Malasia
E-mail: <mohdshar@salam.uitm.edu.my>

Ms.C. Ahmad Nadzri Mohamad
Universiti Teknologi Mara
Country: Malasia
E-mail: <nadzri590@puncakalam.uitm.edu.my>

Ms.C. Fuziah Mohd Nadzar
Universiti Teknologi Mara
Country: Malasia
E-mail: <fuziahmn@salam.uitm.edu.my>

Ms.C. Mohammad Fazli Baharuddin
Universiti Teknologi Mara
Country: Malasia
E-mail: <fazli811@puncakalam.uitm.edu.my>