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LOOKING BACK : THE MASTER OF LIBRARY AND INFORMATION SCIENCE PROGRAMME AT THE UNIVERSITY OF MALAYA, MALAYSIA

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ABSTRACT

Traces the development of library science education programmes in Malaysia, which started out as early as 1955. Describes the MLIS programme conducted at the University of Malaya and the account of thinking that went into the revised MLIS curriculum. Outlines the various steps taken to review the programme's curriculum in keeping with new demands from prospective employers. The programme has been running since 1996. Briefly touches on the LIS research that has helped to enrich the pool of local LIS publications

Keywords: Library Science Education; Information Science; Library Education; Master of Library and Information Science; MLIS programme; Curriculum; University of Malaya

LIBRARY EDUCATION IN MALAYSIA

Lim (1970) traced the development of library education in Malaya to as early as 1955. In the same year, the Malayan Library Group (MLG) was formed and this became the nucleus for the formation of the present library association known as Persatuan Pustakawan Malaysia (PPM). At that time there were no formal library education programmes and the MLG filled this void by actively organising classes in librarianship with the sole purpose of enhancing the quality of library services in Malaya (Kaba, 2001). Table 1 presents the development of library and information science education in Malaysia chronologically.

Table 1 : The Development of Library and Information Science Programme in Malaysia

Year	Activity	
1960	W.J. Plumbe, a librarian at the University of Malaya (UM), submitted a proposal to the	
	UM authorities urging them to include a library school in the second phase of the	
	university building programme. Persatuan Perpustakaan Malaysia (PPM) supported this.	
	At the same time, PPM continued conducting part-time classes to prepare students for the	
	Library Association (United Kingdom) examination (Wijasuriya, 1975).	
1963	The island Republic of Singapore formally separated from Malaysia.	
1965	PPM sent a memorandum to the UM authorities again urging for the creation of a library	
	school at the university.	
1967	The Higher Education Planning Committee (HEPC) Report revitalized the establishment of the school.	
1968	As a result of HEPC Report, the Mara Institute of Technology (MIT) introduced a	
	professional course in librarianship leading to the Library Association (United Kingdom)	
	examination and accreditation.	
1969	At the Southeast Asian Regional Branch, International Council of Archives (SARBICA)	
	Conference on Archivology in Jakarta, both SARBICA and PPM agreed to the	
	establishment of a postgraduate school of librarianship at UM	
1972	A memorandum was sent to the National Library Committee (NLC), which was	
	subsequently approved by NLC with a recommendation for the establishment of the	
	school at UM. PPM strongly felt and insisted that the establishment of the postgraduate	
	school should be at UM because a university should host such a program. MIT was not a	
	university then and as such, there was no postgraduate program in Malaysia yet. They also	
	felt that the course at MIT was not tailored to suit the local environment	
1973	MIT developed and introduced a new curriculum for a three-year course leading to the	
	Diploma in Library Science	
1987	The MLIS program was offered for the first time by UM for the 1987/1988 session at the	
1000	Institute of Advance Studies. However, this course was suspended the following year.	
1992	The International Islamic University, Malaysia (IIUM) introduced the MLIS at the	
1001	Department of Library and Information Science.	
1994	The MLIS programme in UM was revived and transferred to the Faculty of Computer	
100 5	Science and Information Technology in November 1994.	
1995	The MLIS programme at UM registered its first batch of 25 students.	
1995	Universiti Kebangsaan Malaysia (UKM) introduced the Master in Information Science,	
	whilst Universiti Teknologi Malaysia (UiTM) started their Master of Science in	
	Information Management programme.	

THE MLIS PROGRAMME AT UM

The proposal for the establishment of the MLIS programme at the University of Malaya was first put forward in 1960 and approval was given only in 1987. Initially offered under the Institute of Higher Studies, the programme ceased after a year due to manpower constraints. However in 1993, acting upon the directive of the Ministry of Education, the programme was revived with the appointment of a full-time coordinator. The entire programme was then transferred to the Faculty of Computer Science and Information Technology in 1994. Two additional lecturers were hired and the first class commenced in June 1995 with an intake of 25 students.

The Faculty of Computer Science and Information Technology (FCSIT) at the University of Malaya was formally established in 1994 with 45 undergraduates reading for the Bachelor degree in Computer Science. Currently the Faculty's student enrollment stands at 2,117 undergraduates and 582 postgraduate students (Annual Report, 2003). The Faculty offers two undergraduate degree programmes namely the Bachelor of Information Technology (BIT) and the Bachelor of Computer Science (B.Comp.Sc) with specialisation in computer systems and networks, management information systems, software engineering, artificial intelligence, financial management, multimedia, and information science. Apart from the undergraduate programmes, the Faculty offers Master degree programmes in library and information science (MLIS), information technology (MIT), software engineering (MSE), and computer science (M.Comp. Sc.). The core business of the faculty has always been the training of computer scientists and information technologists. However, the faculty has now embarked on programmes to educate information scientists as well.

The MLIS programme at FCSIT is now in its eighth year of inception and currently, 70 students are in various stages of completing their coursework as well as the dissertation component of the programme. The programme is conducted under the semester system and is open to candidates having the necessary qualification from any discipline of study. There are 2 intakes per year, in May and November, into the programme. A total of 36 students registered for the 2002/2003 academic session and 24 students are expected to register for the programme in semester 1 of the 2003/2004 academic session. The MLIS students not only come from diverse academic backgrounds (law, engineering, psychology, physics, chemistry, computer science, social science, and religious studies), but from equally diverse geographic

origins (Sudan, China, Kenya, Sri Lanka, and Oman). Since its inception, the MLIS programme has successfully produced 78 graduates and a further 11 students will be convocating in August 203

The development and changes to the MLIS programme is indicated in Table 2.

1995- 1997	1997 – 2001
Programme of study	Programme of study
The programme consists of 2 parts.	3 options were available and students could
Part 1 : 10 units of courses made up of 9 units	choose any one option :
of compulsory courses and 1 unit of elective	Coursework & dissertation - 6 core courses,
course	2 elective courses and a submission of a
Part 11 : a period of attachment to a library	dissertation of not more than 30,00 words
determined by the Faculty. Upon successfully	Coursework only - 6 core courses and 6
completing this period of attachment,	elective courses
candidates are allowed to undertake research	Dissertation only – submission of a
leading to the submission of a dissertation	dissertation of not more than 60,00 words
of not more than 30,000 words.	
Entry requirements	Entry requirements
A candidate should possess at least : 1 . A Bachelor's degree, with honours, from the University of Malaya, or a degree from another university which is approved by the	For admission to the MLIS program by coursework and dissertation or by coursework only, a candidate should possess:
Senate of the University of Malaya as of equivalent academic status, OR	1 . A Bachelor's degree with honours, from the University of Malaya, or a degree from another university which is approved by the
2. A Bachelor's degree from the University of	University Senate as of equivalent academic

status, OR

Table 2: Changes in Entry Requirements and Programme of Study

2. A Bachelor's degree from the University of Malaya, or a qualification from another university or institution which is approved by the Senate of the University of Malaya as of equivalent academic status, AND, EITHER have at least 3 years working experience in a library or information centre OR an equivalent qualification in a field related to library and

2. A Bachelor's degree from the University of Malaya, or a degree from another university which is approved by the University Senate as of equivalent academic status, AND, EITHER

information studies recognized by the Senate of the University of Malaya as of comparable academic status.	 a. have at least 3 years working experience in a library or information centre OR b. possess the Diploma in Computer Science from the University of Malaya, or a qualification from another university, which is approved by the University Senate as of equivalent academic status.
	For admission to the MLIS programme by dissertation only, a candidate should possess:
	1 . A postgraduate diploma in the field of Library and/or Information Studies from another university which is approved by the University Senate as of equivalent academic status, OR
	2 . A Bachelor's degree with honours from the University of Malaya, or a degree from another university which is approved by the University Senate as of equivalent academic status, in the field of Library and/or Information Studies, OR
	3 . A Bachelor's degree from the University of Malaya, or a degree from another university which is approved by the University Senate as of equivalent academic status, in the field of Library and/or Information Science AND have at least 3 years working experience in a library or information centre.

Towards the end of 2001, the entry requirements were again reviewed to include language competency. The entry requirements were rephrased (Table 3).

(1)

Table 3 : Entry Requirements : Beginning 2002/2003

Admission Requirements

- Through Dissertation Programme
- (a) Qualifications for Admission
 - Bachelor's degree with Honours or a comparable degree from another University or a comparable degree in the field of Library studies or Information studies or have working experience of at least three years in a library or information centre;
 - or
 - (ii) Post degree Diploma in the field of Library studies or Information studies or a comparable qualification or
 - (iii) Other qualifications approved by the Senate from time to time.
 - (b) English Language Proficiency
 - (i) Foreign candidates are required to:
 - (A) have at least IELTS 5.5 or TOEFL 550 if their first degree is from a university where English is not the medium of instruction; or
 - (B) pass an English proficiency test approved by the University.
- (2) Through Coursework Programme and through Coursework and Dissertation Programme
 - (a) Qualifications for Admission
 - (i) Bachelor's degree with Honours; or
 - (ii) Bachelor's degree and;
 - (A) have working experience of at least three years in a library or an information centre;
 - or
 - (B) Diploma in Computer Science of University of Malaya or a post graduate degree in a field related to Library studies and Information Science of another accredited institution.
 - or
 - (iii) Other qualifications approved by the Senate from time to time.
 - (b) English Language Proficiency
 - (i) Foreign candidates are required to:
 - (A) have at least IELTS 5.5 or TOEFL 550 if their first degree is from a university where English is not the medium of instruction; or
 - (B) pass an English proficiency test approved by the University.

CURRICULUM DEVELOPMENT

A curriculum is a fundamental part of any education or training programme largely because it provides not only a list of courses or modules offered in a programme, but it also gives information on content, purpose, method, time/duration, trainers and location or situation of a programme or course (Ocholla, 2001). Furthermore, the intellectual content of the curriculum for any programme has to keep pace with the demands of the profession. However, the literature of LIS in Malaysia does not show an encouraging view of LIS curricula development in the country. Curriculum development has always been done in isolation by the institutions running the various programmes without any form of consultation with the potential employers.

True to form, the pre-2000 MLIS curriculum at the University of Malaya was initially very much embedded in the traditional library science courses. However, in the year 2000, the curriculum was revised not only to cater for the need of students from diverse backgrounds but also to meet the demands for a more IT oriented graduate. The present system tries to strike a balance between LIS contents and a working knowledge of planning and managing information systems. The core courses remain close to basic LIS subjects and more IT related courses are offered as elective courses. Since the programme is attached to a computer science faculty, it can therefore cater for the changes. Two new electives, namely Self-directed Study and Library Practicum, have been included to encourage research and independent learning. A total of 3 core courses and 5 - 6 elective courses are offered in each semester.

The International Federation of Library Associations and Organizations (2000) guidelines for professional library/library educational programs recommended that the core elements in a LIS curriculum should include :

- a. The information environment, information policy and ethics, the history of the field
- b. Information generation, communication and use
- c. Assessing information needs and designing responsive services
- d. The information transfer process
- e. Organization, retrieval, preservation and conservation of information
- f. Research, analysis and interpretation of information
- g. Applications of information and communication technologies to library and information products and services
- h. Information resource management and knowledge management

- i. Management of information agencies
- j. Quantitative and qualitative evaluation of outcomes of information and library use

Similarly, Reichel (1999) noted that the Association of College and Research Libraries recommended that library schools should train graduates in :

- a. Theory, principles and history of librarianship
- b. In-depth knowledge of the higher education environment
- c. Preparation for scholarly work
- d. Understanding technological issues
- e. Conducting information literacy programmes
- f. Planning, managing and assessing libraries' effectiveness
- g. Knowledge of legal and policy issues
- h. Considerations of ethical issues
- i. Understanding and appreciation of diversity

Table 4 : The Pre and Post 2000 MLIS Cou	urse Structure
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The Old Curriculum : 1995-1999 Core Courses		The New	Curriculum : 2000-present
		Core Courses	
WXGB5001 WXGB5002 WXGB5003 WXGB5004	Management of Information Services Information Sources and Services Collection Management Organization of Information	WXGB6101 WXGB6102 WXGB6103 WXGB6104	Management of Information Services Information Sources and Services Organization of Information Research Methods in Library
WXGB5005 WXGB5006	I Computer Applications in Library and Information Systems Research Methods in Library and Information Science	WXGB6105 WXGB6106	and Information Science Technologies for Information Management Information Retrieval

Elective Courses		Elective Course	es
WXGB5010	Information and Society	WXGB6301	Legal Issues in
WXGB5011	Legal Issues in Information		Information Science
	Science	WXGB6302	Human Aspects of
WXGB5012	Human Factors in		Information Systems
	Information Systems		Design
	Design	WXGB6303	User Needs and Behaviour
WXGB5020	Malaysiana Resources	WXGB6304	Development of
WXGB5021	Science and Technology		Information Collection
	Resources	WXGB6305	Indexing, Abstracting and
WXGB5023	Business Resources		Thesauri Construction
WXGB5024	Government Publications	WXGB6306	Electronic Publishing
WXGB5025	Multimedia Resources	WXGB6307	Special Topics in
WXGB5026	Manuscript Studies		Information Science
WXGB5030	National Libraries	WXGB6308	Directed Individual Study
WXGB5031	Academic Libraries	WXGB6309	Practicum in Information
WXGB5032	Public Libraries		and Library Services
WXGB5033	Special Libraries	WXGB6310	Management of Internet
WXGB5040	Organization of		Resources
	Information II	WXGB6311	Digital Libraries
WXGB5041	Bibliometrics	WXGE6102	Information Systems:
WXGB5042	Subject Analysis and		Fundamentals,
	Classification of		Procurement and
	Information Resources		Operational Issues
WXGB5050	Library Automation	WXGE6104	Visual Programming
WXGB5051	Applications of Information	WXGE6308	Knowledgement
	Technology		Management
WXGB5052	Management of Internet	WXGE6311	Multimedia System
	Resources		Development
WXGB5053	Computer Data Security	WXGB6180	Dissertation
WXGB5054	Digital Libraries		
WXGB5060	School Resource Centres		
WXGB5061	Educational technology		
WXGB5062	Resources for Children and		
WWGD5062	Youth		
WXGB5063	Services of Educational		
WWCD5070	Centres		
WXGB5070	Records Management and		
WVCD5071	Archives		
WXGB5071	Publishing and the Book		
WVCD5072	Trade		
WXGB5072 WXGB5080	Technical Writing Dissertation		
WAUB3080	Dissertation		

Table 4 shows that the current MLIS programme complies closely to the guidelines recommended by the International Federation of Library Associations and Organizations (2000) and the recommendations of the Association of College and Research Libraries (1999).

The MLIS courses also conform to Gorman & Corbitt's (2001) model of core competencies for LIS, which covers 4 areas that encompass the basic knowledge of present day library science professionals (Table 5 and 6). Mahmood (2001) felt that nowadays "competence is considered more in terms of skill-oriented behavior and observable actions measured against quantitative standards; one's competence is judged on the basis of whether or not learned mental and physical tasks can be performed". On the other hand, the Council of Europe defined competency as "the set of knowledge and skills that enable an employee to orient easily in a working field and to solve problems that are linked with their professional role". The New Jersey Library Association (2001) divides competencies into professional (8 divisions) and personal (7 divisions). Keeping in view the needs of the Asia/Pacific Region, Moore (1998) prepared a detailed curriculum for information education. which covered the 3 elements of knowledge, skills, tools for the creation, collection, communication and consolidation of information. In the process, he devised 4 competency terms, namely, creators, collectors, communicators and consolidators. Yale University Library (2000) identified 5 core competencies for future job performance of its staff namely resource, interpersonal skills, information, systems, and technology. Again, the MLIS courses offered at FCSIT fit in comfortably within the varying core competency criteria.

Client needs and services	
This is the focus of the user-oriented tradition characteristics of LIS. It is the pinnacle	
or driving competency in LIS education	
Management	
Focuses on the human component of not only the technology but the range of	
processes related to knowledge and client use of knowledge resources	
Technology utilization	
Implies that the organization of knowledge is facilitated and focused on clients' needs.	
Organization of knowledge and knowledge resources	
The intellectual process of knowledge organization and the activity of resource	
collection. This is the basis of the library and information science education.	

Table 5 : Gorman & Corbitt's Model of Core Competencies for LIS

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Client needs and services	Research Methods in Library and Information Science	
	Human Aspects of Information systems Design	
	User Needs and Behaviour	
Management	Management of Information Services	
	Legal Issues in Information Science	
	Practicum in Information and Library Services	
Technology utilization	Technologies for Information Management	
	Information Retrieval	
	Electronic Publishing	
	Management of Internet Resources	
	Digital Libraries	
	Information Systems: Fundamentals, Procurement and	
	Operational Issues	
	Knowledge Management	
	Multimedia System Development	
	Visual Programming	
Organization of	Organization of Information	
knowledge and	Information Sources and Services	
knowledge resources	Development of Information Collection	
	Indexing, Abstracting and Thesauri Construction	

Table 6 : MLIS Courses at FCSIT Fitted into Gorman & Corbitt's Model of Core Competencies

THE MLIS PROGRAMME AND LIS RESEARCH PROJECTS

The Faculty offers ample opportunities for staff and research students to undertake research. This element has been incorporated into the postgraduate degree programmes through 3 electives, namely Self-directed Study, Library Practicum and Dissertation. Collectively, the MLIS graduates have submitted 53 dissertation titles, with 4 titles submitted between 1991 and 1992 and 49 titles between 1997 and 2002 (Appendix 1). Currently, the dissertation component is offered as an elective and carries twelve credits.

Another avenue for the dissemination of research results is provided via the *Malaysian Journal of Library and Information Science (MJLIS)*. This is an academic refereed journal published by the Faculty (Zainab & Edzan, 2000). Contributions come from authors in Sri Lanka, India, Bangladesh, Botswana, Taiwan, the United States, Australia, New Zealand, Singapore and Malaysia. The contribution from

academics who teach in the MLIS programme is ranked the highest, that is 35 out of the 103 articles published in *MJLIS* between 1996 and 2002.

LOOKING AHEAD

LIS schools have to prepare students for careers in all types of libraries and for all information intensive jobs beyond libraries, including web publishing, information brokering and marketing, corporate information specialty, and intranet management. If LIS schools continue to teach the basics while at the same time expand and upgrade their curriculum in line with the demands of ICT oriented environment, the new LIS graduates will enter the job market with ease.

Globally, information science has evolved very rapidly and areas of knowledge relevant to the subject have given rise to a variety of programmes of study. These criteria are reflected in the various courses offered to the MLIS students via the revised curriculum. However, there is still an urgent need for the Faculty to examine the effectiveness of the programme and maintain a balance between the programme relevancy and student employability. There is an apparent absence of proper feedback from the profession about the quality of graduates being produced. At the same time, there should be a monitoring system in place to oversee the formulation of the curriculum and to make sure that it satisfies the needs of the profession.

For the graduates from the MLIS degree programme, success can be clearly measured by their employment track record. Approximately 75 percent of the University of Malaya MLIS graduates are either employed in professional positions within six months of graduation or promoted to better positions in the field of librarianship. Graduates from this programme are currently employed in a wide variety of jobs ranging from information managers to information system brokers. Currently, the programme boasts a strong alumni network.

Presently the MLIS programme will adhere to its goal to serve the current primary market for its graduates – libraries and information centers, and will broaden the employment opportunities for the graduates as well as make the programme more visible to a wider segment of the information industry.

REFERENCES

- Abdoulaye, Kaba. 2001. State of library and information science education in Malaysia : a comparative study. *Paper presented at the International Conference for Library & Information Science Educators in the Asia Pacific Region*, 11 – 12 June 2001, Petaling Jaya, Malaysia
- Annual Report = Laporan Tahunan. 2003. Kuala Lumpur : Faculty of Computer Science and Information Technology, University of Malaya
- Gorman, G.E and B.J. Corbitt. 2001. Core competencies in information management education. *Paper presented at the International Conference for Library & Information Science Educators in the Asia Pacific Region*, 11 12 June 2001, Petaling Jaya, Malaysia.
- International Federation of Library Associations and Organizations. 2000. *Guidelines* for profesional library/library educational programs. Available at: http://www.ifla.org/VII/s23/bulletin/guidelines.htm
- Lim, Edward Huck Tee. 1970. Libraries in West Malaysia and Singapore : a short history. Kuala Lumpur : University of Malaya Library..
- Mahmood, Khalid. 2001. A comparison between needed competencies of academic librarians and LIS curricula in Pakistan. Paper presented at the International Conference for Library & Information Science Educators in the Asia Pacific Region, 11 – 12 June 2001, Petaling Jaya, Malaysia.
- Moore, Nick et al. 1998. A curriculum for an information society : education and training information professionals in the Asia-Pacific Region. Bangkok : UNESCO Regional Office for Asia and the Pacific
- New Jersey Library Association. Professional Development Committee. Core Competencies Ad Hoc Committee. 1999. *NJLA core compentencies for librarians*. Available at : http://www.njla.org/statements/competencies.html

- Ocholla, Dennis N. 2000. Review and revision of libray and information science curriculum in a South African University and the usage of follow-up study and advertisement scanning methods. Available at: http://www.slis.ualberta.ca/cais2000/ocholla.htm
- Reichel, M. 1999. Issues in higher education and library and information studies education. *Background paper prepared for the ALA Congress on Professional Education*, April 30 – May 1, 1999. Available at: http://www.ala.org/congress./acrl/htm
- Wijasuriya, D.E.K.; Edward Lim Huck Tee and Radha Nadarajah. 1975. *The barefoot librarian : library developments in Southeast Asia with special reference to Malaysia*. London : Bingley.
- Yale University Library. 2000. The Secretary's Commission for Achieving the Necessary Skills (SCANS) for the Workplace. Available at : http://www.library.yale.edu/training/stod/competencies.htm
- Zainab, A.N. and Edzan, N.N. 2000. Malaysian scholarly e-journals : focus on EJUM, a journal management system. *Malaysian Journal of Library and Information Science*, 5(2), 69-84. Available at : http://www.ejum. fsktm.um.edu.my

APPENDIX 1

MLIS Dissertations Submitted to FCSIT

- 1. Abd. Rahim Abd. Rahman. Sejarah pusat sumber sekolah di semenanjung Malaysia 1800-1995. 1998.
- 2. Abeyrathna, Ranjith. The role of teacher librarians : a Sri Lankan perspective. 2002.
- 3. Abrizah Haji Abdullah. Competencies for teacher librarians in Malaysia. 1998.
- 4. Adlina Norliz Razali. Penggunaan komputer di kalangan pelajar-pelajar sekolah menengah di negeri Kelantan. 1998.
- 5. Ambikapathi Shanmugam. Information seeking behaviour of trainee teachers in selected teacher training colleges in the state of Johore. 1999.
- 6. Anjik, Jennifer. The management of teacher's activity centers : a case study of six selected centers in Sabah. 2002.
- 7. Ariyapala, P.G. Use of the University of Malaya's Library OPAC by foreign postgraduate students. 2002.
- 8. Block, Jayatissa. Information marketing of free-based services in academic libraries in Sri Lanka. 2002.
- 9. Chall, Devinder Kaur. Responses to reference questions: study of reader services in selected university libraries in Malaysia. 1992.
- 10. Che Azlan Taib. Kajian mengenai minat dan tabiat membaca di kalangan kanak-kanak sekolah rendah: satu kajian kes di daerah Kubang Pasu, Kedah Darulaman. 1997.
- 11. Cheeah Halimah Abd. Talib. Persepsi guru-guru di daerah Petaling Selangor Darul Ehsan terhadap keberkesanan Pusat Kegiatan Guru. 1999.
- 12. Chew, Pang Hee. Library and information services for distance education in Malaysia. 1998.
- 13. Elbakhiet, Abdalla Barakat. The impact of the internet on the library: usage patterns and perceptions of postgraduate students at the University of Malaya. 1998.
- 14. Elgasim, Imad Eldin Khalifa A. Designing a curriculum in school librarianship for the Faculties of Education in Sudan. 1998.

- 15. Fatimah Abdillah. Keberkesanan penggunaan perpustakaan desa di Sabah. 1999.
- 16. Goi, Sook Sze. Analysing the research trends and use of information sources amongst postgraduate students in the humanities. 1997.
- 17. Gu, Yinian. An analysis of Malaysian computer science and information technology research publications in selected international databases. 2000.
- 18. Harvinder Kaur d/o Bakhtawar Singh. Information needs of academic staff at the University of Malaya in a digital environment. 2000.
- 19. Hasnita Haji Ibrahim. Kajian penggunaan internet dalam perkhidmatan gunasama perpustakaan, di bawah pengawasan Perpustakaan Negara Malaysia. 1999.
- 20. Jayaweera, A.G. Nimal. A study of user education programmes in schools in Sri Lanka. 2002.
- 21. Lee, Kee Hiong. Evaluation of academic library web sites in Malaysia. 2000.
- 22. Leelwathy a/p Kanapathy Pillai. A descriptive study on the research trends of postgraduate students in the sciences. 2000.
- 23. Maria bt Sinti. Keperluan maklumat remaja di Kota Kinabalu, Sabah. 1999.
- 24. Mohan Palaniandy. Information needs of children: an exploratory qualitative study. 1998.
- 25. Mohd Abdul Hafiz Mohd Radzi. Keperluan dan tabiat pencarian maklumat di kalangan pengamal perubatan di HUKM. 2001.
- 26. Mohd Azlee Abd Aziz. Keperluan maklumat wartawan : bagaiman wartawan menggunakan perpustakaan. 2002.
- 27. Mohd. Rafae Abdullah. A study of internet usage among schoolteachers in Alor Setar, Kedah. 1999.
- 28. Ng Siew Ling. A study of journal overlaps, duplicates and costs in the field of computer science held in selected Malaysian university libraries. 2001.
- 29. Nik Asma Nik Ahmad. Analisis koleksi sains dan teknologi pusat sumber sekolah: satu kajian di empat buah sekolah menengah di negeri Selangor. 1998.

- 30. Noora`ini Din. Corak penggunaan jurnal fizik di Perpustakaan Universiti Malaya. 1991.
- 31. Nor Anisah Abdul Malek. A study on the IT literacy amongst librarians in goverment: supported special libraries in Malaysia. 1998.
- 32. Norhamimi Othman. Keberkesanan penggunaan laman web Perpustakaan Universiti Malaya di kalangan kakitangan akademik. 2002.
- 33. Noridah Mohamed. Kesedia-adaan bahan atau `material availability': satu kajian pencapaian perpustakaan, Perpustakaan Utama, Universiti. 1992.
- 34. Norishah Mat Din. Penerbitan jurnal ilmiah di Malaysia. 1999.
- 35. Roosfa Hashim. Status serta sikap ahli akademik di Malaysia terhadap e-jurnal ilmiah. 2000
- 36. Roslina Suratnu. Kajian mengenai penggunaan mod pencarian kata kunci (keyword searching) di kalangan pengguna-pengguna OPAC di Perpustakaan Universiti Malaya. 1998.
- 37. Samia Mohamed Malik. Information needs of foreign women in Malaysia, with special reference to the Sudanese community. 1999.
- 38. Sapiah Sakri. A citation analysis of theses and dissertations in education submitted to the University of Malaya. 1997.
- 39. Seow, Foong Chan. *Planning for library automation in the University of Malaya Library: a case study.* 1992.
- 40. Sharon Manel De Silva. CoPas: an experimental expert adviser system for cataloguing published conference proceedings. 1998.
- 41. Shahizan Affandi Zakaria. Organisasi bahagian pengkatalogan/pemerosesan teknikal : perlaksanaan masa kini di Malaysia. 2002.
- 42. Shahrozat Ibrahim. Legal deposit of electronic publications : Perpustakaan Negara Malaysia's experience. 2001.
- 43. Siti Hadijah Alwi. Peranan Pengetua di dalam membangunkan pusat sumber sekolah : tumpuan kepada sekolah menengah harian di negeri Selangor. 2002.
- 44. Sundakumari Rengasamy. The current status of resource centres in Malaysian Tamil Schools. 1998.

- 45. Sunil, W. Collection development of selected school resource centres in Sri Lanka. 2002.
- 46. Teow, Poh Lin. Provision of access to online databases for undergraduates of local private higher education institutions. 2002.
- 47. Thenabadu, Padmasiri. A study on training programmes for teacher librarians in Sri Lanka. 2002.
- 48. Tiew, Wai Sin. Journal of the Malaysian branch of the Royal Asiatic Society (JMBRAS) 1987-1996: a bibliometric study. 1998.
- 49. Wee, Siu Hiang. Use of information sources by upper secondary science students in Kuala Lumpur. 1999.
- 50. Yong, Ngi Lang. The current status of resource centres in Malaysian Chinese schools. 1997.
- 51. Yoong Suan Kui. A bibliographic survey on Baba literature : focus on Chinese literary translated works into Baba Malay. 2001.
- 52. Zanaria Saupi Udin. A study of leisure reading habits and interests among students in Malaysian higher-learning institutions. 1999.
- 53. Zuraidah Saidon. Factors affecting the implementation of information technology in secondary schools within the Klang Valley. 1998.