CATALOGUERS' COMPETENCIES IN THE ACADEMIC LIBRARY ENVIRONMENT IN MALAYSIA

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Abstract: *Academic libraries are part of teaching-learning and research endeavours of universities or institutions of higher education. In order to carry out this important role, one requirement that academic libraries must have is a team of competent cataloguers to organize the library collections. Academic library cataloguers need to have the required competencies to carry out their tasks and perform their work professionally. They need to possess several competencies related to their job scope in the organizations they serve. The main purpose of this study is to investigate the competencies needed by cataloguers in the Malaysian academic library environment. The objectives of the study are to identify the core competencies for academic library cataloguers, to identify the approaches used to increase the competencies of the cataloguers, and to describe the challenges faced by cataloguers in the academic library environment. This study used the quantitative research methodology. Questionnaires were distributed to a total of 39 cataloguers who work in selected academic libraries in the Klang Valley. The study population consisted of all cataloguers attached to the cataloguing departments who are essentially responsible for cataloguing the library materials. The results revealed that the various competencies of the cataloguers can be grouped into four categories: crucial competency, required competency, basic competency and least required competency. Competent cataloguers need to also acquire general skills in order to present their best work performance. The approaches and challenges faced by cataloguers in carrying out their tasks were found to be useful in identifying the core competencies needed.*

Keywords: *Core competencies, cataloguers, academic libraries, cataloguing competencies, general competencies.*

INTRODUCTION

Libraries have been one of the main information providers for the academic community in teaching and research activities. As an information provider, the key to a library's success is to provide the best means of delivering the right information to meet their patrons' needs at the right time. Information professionals who work in a library are responsible for the systematic organization of the information materials in order to provide library users with easy access to the information materials they need. Academic libraries are part of the teaching-learning and research endeavours of their universities or institutions of higher learning. Universities and institutions of higher learning are beginning to pay greater attention to research and publishing, and this has encouraged a research culture among the faculty members, research staff and students. Though undertake research and publishing for various reasons, such as for tenure status, for promotion exercise, for annual assessments and appraisals, for meeting with the graduation requirements, etc. Academic

libraries are engaged with their patrons in providing access to quality information, on-demand information resources and just-in-time services. Webb, Gannon-Leary, and Bent (2007) stressed that effective academic libraries are gateways to academic knowledge through their own collections and by facilitating access to materials. Academic librarians play key roles as service providers, as partners with the teaching faculty, and as builders of strong systems and collections.

Academic library cataloguers are tasked with the responsibility of organizing information resources and library materials by creating accurate representations of information of these materials in their libraries. They must be qualified cataloguers and classifiers, possessing the required competencies, necessary skills and experience in order to do their work remarkably. Banush (2008) declared that a cataloguer's work is highly detailed. Cataloguing entails specific description of each information item in the library, assigning it appropriate subject headings and providing a call number for the purpose of storage and retrieval. Cataloguers must conform to the standards and rules used, work with the cataloguing tools provided, adhere to the cataloguing policies of the cataloguing department, and most importantly, the cataloguers must possess the knowledge together with the necessary skills and competencies to carry out these cataloguing tasks. Amidst this highly complex work, a cataloguer is required to make many decisions at many levels of the work before the cataloguing is complete and the library materials are ready to be placed on the shelves for users' use and reference. The growth of information in digital format in this digital age has also posed a challenge to library and information professionals, particularly those involved in cataloguing work. The cataloguer's task is now much broader in scope, including cataloguing of digitized resources. According to Byrd et al. (2006), cataloguers will be educated to work in the digital arena. Instead of being trained in a single cataloguing code and format, they will be skilled in applying the appropriate metadata format to a particular situation. Their job descriptions have expanded to include responsibilities for description and access to whichever format of the product created. Furthermore, the Chartered Institute of Library and Information Professionals (CILIP) Body of Professional Knowledge (BPK) has established unique knowledge which distinguishes library and information professionals from professionals within other disciplines. In practical terms, a library or information professional must have an in-depth understanding of the management of knowledge, documentation, storage and retrieval, collection development and management and information service provision (CILIP, 2009).

Cataloguers play a pivotal role in ensuring the successful operation of the academic libraries and the services offered to their clientele. Against this backdrop, this study aims to identify the core competencies and skills that academic library cataloguers must possess in order to play their increasingly important role as builders of strong collections. Additionally, the approaches used to enhance the competencies of cataloguers and to describe the challenges they face in an academic library environment are investigated. The following research questions were derived from the objectives of this study:

- What are the core competencies needed by cataloguers of academic libraries?
- What are the approaches used to enhance the competencies of these cataloguers?
- What are the challenges faced by cataloguers in an academic library environment?

LITERATURE REVIEW

Competencies for cataloguers of academic libraries

Rehman, Majid and Baker (1997) conducted a study of competency definitions and validations for library and information professionals. A total of 167 individuals from university libraries, state libraries and special libraries were identified. The findings of this study were divided into several competencies, i.e. generic competencies, cataloguing competencies, circulation competencies, information service competencies and serials competencies. Knowledge of cataloguing principles, rules, systems, and tools received the highest mean score of 8.76, followed closely by knowledge of cataloguing methods, techniques, and products with a mean score of 8.72. The other two knowledge competencies, validated with mean scores of 7.71 and 7.67 respectively, were related to philosophy, systems, and strategies of information organization and retrieval, and to systems and instruments for cooperative cataloguing. Among the skill competencies, the application of cataloguing rules was considered the most important with a mean score of 8.46.

A survey conducted by Butler and Garcha (1998) of cataloguers in ALA's Technical Services Division indicated the changes of cataloguer's responsibility in a ten year periods between 1987 and 1997. The study aimed to determine the current job functions performed by cataloguers in academic libraries, and how these functions have changed over the past ten years so as to provide information of significance to library administrators and library and information science educators. The quantitative study used questionnaires which were mailed randomly to 500 cataloguers which resulted in 271 responses returned. The questionnaire design was based on a list of 67 traditional and emerging activities in which cataloguers in academic libraries were involved. The findings showed that since 1987 the cataloguers had expanded their cataloguing to include audiovisual materials, digital documents and internet resources. However, the cataloguers in more than 90 percent of the libraries surveyed were still involved in the tasks of descriptive cataloguing, subject analysis and classification.

Hayati (2008) conducted a study with the aim of investigating competency requirements of Iranian public librarians in library educational departments and work place. The researcher concluded that competencies such as generic knowledge and skills of cataloguing, management of collections, information sources and acquisition tools were recognized as important and necessary. The findings also showed that the knowledge and skills related to original cataloguing work was determined to be important. Shared and cooperative cataloguing work and the use of cataloguing utilities and systems indicated that networking and the use of cataloguing products were still new to the participants.

Approaches used to enhance the competencies

A survey was also made towards 124 Association of Research Libraries (ARL) member libraries to investigate the status of core competencies. The survey showed that institutions provide many types of training programs for employees to help them attain adequate levels of competencies. Of the libraries surveyed, 88% provided in-house training, 76% sent their staff to external workshops, and 58% under went training from parent organizations, while 53% used online training. Several respondents claimed that competency levels could also be improved with coaching from managers, supervisors and through informal peer networks. Core competencies presented some benefits, such as providing better

understanding of the skills, knowledge, abilities and attributes valued by an organization, as well as a basis for developing staff development and training programs (SPEC Kit Core Competencies, 2002).

Glasser (2007) noted that cataloguers in the future should be flexible, be willing to learn, be able to tolerate change and be capable team players. She also added that employer's expectation of the skills and traits of cataloguers include good practice of bibliographic control in the current environment of constant change. With the growth of electronic resources today, the ability to use and apply non-MARC metadata standards like the Dublin Core Metadata Element Set (DCMES) and Encoded Archival Description (EAD) is a skill which meets employer expectations. In addition to traditional cataloguing skills, management skills, computer skills, oral and written communication skills, teaching skills, and knowledge of non-MARC metadata standards are all being asked of cataloguers today.

Kwak (2006) examined the types of job training that cataloguing and classification staff have in order to deal with the current and changing environment in their libraries. The findings showed 64.3% of the respondents underwent job training when they obtained their new jobs, 54% of the respondents were instructed by their supervisors to undergo job training, and 39.7% respondents received job training from their colleagues. Librarians who received training were found to be capable of undertaking a new job while on-the-job training is considered a necessity for experienced librarians, particularly with the introduction of new systems, in the light of new developments in digital libraries.

Challenges faced by cataloguers in the digital environment

Leysen and Boysdton (2005) also noted that, several obstacles may delay professional cataloguers' involvement in new digital initiative. Some metadata schemes that often conflict with traditional cataloguing standards have been, and are being, developed by various organizations other than libraries. Advances in technology, for instance, the automated harvesting of information, may limit the need for, and level of cataloguers' involvement in organizing digital contents. Cataloguers may not have the depth of subject expertise required for specialized metadata projects. Among the challenges and strategies for cataloguing at Yale University as described by Swanekamp (2001) are human resources issues, such as recruitment of new cataloguing librarians and qualified support staff, as well as staff training and development. Issues regarding catalogue management include retrospective conversion cleanup projects to assure the accuracy of online holdings and a mandate to ensure the ongoing quality of the catalogue. Cataloguers must raise cataloguing productivity and effectiveness by the use of technology in their work. Copy cataloguing will be much more effective as support staff receives additional training to enable them to better analyze complex copy, and deal with a broader range of copy cataloguing situations.

METHODOLOGY

Population

The target population for this research is the cataloguers who work in six Malaysian academic universities in the Klang Valley. These academic libraries are Perpustakaan Tun Abdul Razak (UiTM), Perpustakaan Tun Sri Lanang (UKM), Perpustakaan Sultan Abdul Samad (UPM), Perpustakaan Universiti Malaya (UM), Perpustakaan Universiti Islam Antarabangsa Malaysia (IIUM) and Perpustakaan Sultanah Zanariah (UTM) Jalan

Semarak, Kuala Lumpur. The study population consisted of the cataloguers from the cataloguing departments who are responsible for cataloguing the library materials. A total of 39 cataloguers working in the academic libraries of public universities in the Klang Valley were identified as respondents. This study excluded the academic libraries of private universities in the Klang Valley.

Questionnaire distribution

The questionnaires were delivered by hand, and by post to the assigned representatives in each academic library that has been chosen as the sample for this study. Questionnaires were distributed in March 2011 to each of the 39 cataloguers who worked at the respective academic libraries. The return date was set for five days after the distribution.

FINDINGS

From the total of 39 questionnaires distributed, 36 questionnaires were returned, accounting for a 92% response rate.

Table 1: Number of respondents

Academic Libraries	Number of cataloguers	Questionnaire Sent	Questionnaire Returned	Percentage (%)
Sultan Abdul Samad Library (UPM)	9	9	9	23.1
Sultanah Zanariah Library (UTM), Jalan Semarak	1	1	1	2.5
Tun Abdul Razak Library (UiTM)	8	8	5	12.8
Tun Sri Lanang Library (UKM)	6	6	6	15.4
International Islamic University Library (IIUM)	6	6	6	15.4
University of Malaya Library (UM)	9	9	9	23.1
Total	39	39	36	92.3

Table 1 illustrates the total respondents and the percentage of returned questionnaires from each institution. Based on Table 1, the total number of respondents for this study were 36 respondents (N = 36).

Demographic Profile

Table 2: Educational level

Educational level	Frequency	Percent (%)
Bachelor in Library Science	23	63.9
Master in Library Science	11	30.6
Others	2	5.6
Total	**36**	**100.0**

The educational level for the respondents is shown in Table 2. The data show that 94.4% (N=34) of the respondents have an undergraduate degree in library science.

Working experience in the cataloguing field

Table 3: Working experience

Working experience in the cataloguing field	Frequency	Percent (%)
Less than 1 year	4	11.1
1-2 years	9	25.0
3-5 years	10	27.8
More than 5 years	13	36.1
Total	**36**	**100.0**

Table 3 shows the number of years that respondents have worked in the cataloguing field. Most of the respondents are experienced cataloguers, with 63.9% (N=23) having at least three years experience as a cataloguer.

Cataloguing competencies for cataloguers in academic libraries

On a scale of 1-5 for perceived core cataloguing competencies, respondents rated all competencies with a mean score of at least 3.14. This indicates that all competencies listed were viewed by respondents as being 'of some importance' to 'very important' for cataloguers to accomplish excellent performance in their jobs. Table 4 below details the overall ranking of the competencies rated by the respondents. The ability to prepare and maintain a catalogue of the collections was rated as very 'important' by the cataloguers in the academic library environment. The ability to index the available materials and perform original cataloguing, plus having familiarity and experience using and handling cataloguing tools as well as using classification tools are equally important. This indicates that it is important for cataloguers to acquire the competence of using the cataloguing tools in carrying out the cataloguing tasks. Developing authority files for cataloguing work, utilizing classification principles, organizing materials according to a classification scheme, and analysing content to determine class numbers and subject terms were also considered 'very important' to cataloguers. Beside that, cataloguers regarded copy cataloguing and the possessing subject knowledge of specific areas or discipline as 'very important'. The ability in the use of metadata standard schemes, the knowledge of new cataloguing tools, and the ability to catalogue non-English and non-Malay language materials were not regarded as important.

Table 4: Cataloguing competencies for cataloguers in academic libraries

Cataloguing Competencies	Percentage (%)					N	Mean
	Not important	Of least importance	Of some importance	Important	Very important		
Ability to prepare and maintain a catalogue of the collections	-	-	-	38.9	61.1	36	4.61
Ability to index the available materials	-	-	2.8	44.4	52.8	36	4.5
Ability to do original cataloguing	-	-	8.3	33.3	58.3	36	4.5
Familiarity and experience using and handling cataloguing tools	-	-	-	44.4	50	36	4.44
Familiarity and experience using classification tools	-	-	8.3	38.9	52.8	36	4.44
Ability to develop authority file for cataloguing	-	-	2.8	52.8	44.4	36	4.42
Ability to utilize classification principles and organize materials according classification scheme	-	-	5.6	50	44.4	36	4.39
Content analyzing to determine class number and subject terms	-	-	2.8	58.3	38.9	36	4.36
Ability to do copy cataloguing	-	-	16.7	36.1	47.2	36	4.31
Require to possess subject knowledge of specific areas/discipline	-	-	5.6	58.3	36.1	36	4.31
Cataloguing of non-print and specialized materials	-	-	16.7	38.9	44.4	36	4.28
Knowledge of cataloguing resources and tools available from Internet	-	-	16.7	52.8	30.6	36	4.14
Knowledge for systems and instruments for cooperative cataloguing	-	5.6	5.6	52.8	33.3	36	4.14
Knowledge of third language proficiency	2.8	2.8	19.4	47.2	27.8	36	3.94
Ability in the use of Metadata standard schemes	-	11.1	11.1	50	16.7	36	3.72
Knowledge of new cataloguing tools	-	11.1	11.1	44.4	16.7	36	3.67
Ability to catalogue non-English and non-Malay language materials	-	2.8	5.6	41.7	50	36	3.14

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General competencies for cataloguers in academic libraries

Table 5 indicates how respondents ranked general competencies for cataloguers. Their responses show that it is very important for the cataloguers to be able to work in teams. In addition, cataloguers must be able to have good time management as it will affect their work performance. Cataloguers ranked communication skills as very important, and rightly so, since the ability to communicate effectively is a requirement in all fields. It is interesting to note that cataloguers do not rank leadership and supervisory skills as very important. Overall, it can be seen that respondents rated the listed general competencies as 'important' and 'very important' for the cataloguers, which suggests that the listed competencies were very significant for their work performance.

Table 5: Ranking of general competencies for cataloguers in academic libraries

Cataloguing Competencies	Percentage (%)					N	Mean
	Not important	Of least importance	Of some importance	Important	Very important		
Working in teams	-	2.8	2.8	36.1	58.3	36	5
Time management	-	-	-	36.1	63.9	36	5
Use of computers and other information technologies	-	-	5.6	85.6	38.9	36	4.33
Ability to negotiate effectively with others within or outside of the organization	-	-	11.1	63.9	25.6	36	4.14
Leadership and governance	-	5.6	11.1	58.3	25	36	4
Supervising subordinate staff	-	-	13.9	52.8	33.3	36	4
Organizing extension activities for academic community	-	-	5.6	77.8	16.7	36	4
Ability to learn effectively and continuously	-	-	-	61.1	38.9	36	4
Ability to speak effectively in front of groups	-	-	8.3	47.2	44.4	36	4
Ability to communicate effectively	-	2.8	5.6	61.1	30.6	36	4

Approaches used to raise cataloguing competencies

The findings on courses and training sessions attended shown in Table 6 indicates the number of multiple responses from 36 respondents, which suggests that each respondent had identified 2.9 types of training opportunities attended. However, this does not account for multiple opportunities, e.g. attending more than one conference, but merely the number of different kinds of opportunities made available. Classification accounted for the type of training program highly attended by the cataloguers, i.e. 22 out of 36 respondents (61.1%), since all cataloguers are fully aware that this is a very important skill they should master in order to perform their cataloguing tasks well. Attending conferences some time during their employment were indicated by 18 or 50% of the respondents, suggesting that institutions provide a significant amount of support for this activity and that cataloguers view attending conferences as a means to gain new knowledge in cataloguing and classification and very supportive to their growth and development in the field. Of the 36 respondents, 16 or 44.4% felt that attending personal skills courses were of relevance to the skills and competencies needed for their work. The same number of respondents (15 or 41.7%) had attended both types of copy cataloguing and technical services courses. Meanwhile, 30.6% (11) of the respondents stated that they had attended the Resource Description and Access (RDA) and Functional Requirements for Bibliographic Records (FRBR) courses provided by their libraries. About 3.9% (5) of the respondents stated that they had attended other courses such as medical subject headings courses, original cataloguing courses, MARC 21 training, and training for reference and information searching. Only 5.6% (2) of the respondents had not attended any course/training at all.

Table 6: Courses/training attended by the cataloguers provided by the library

Courses/Training	Responses (Percent)	
Copy cataloguing training	15	41.7%
Classification training	22	61.1%
Attending technical services courses	15	41.7%
Attending conferences related to new knowledge in the cataloguing field	18	50%
RDA and FRBR courses	11	30.6%
Personal skills courses	16	44.4%
Others	5	13.9%
I have not attended any course/training	2	5.6%
Total of responses (N=36)	104	

Table 7 refers to the regularity of the respondents attending any course or training in a year for the purpose of improving their competency. Majority of the respondents or 61.1% (22) stated that they attend a course/training 2 times in a year, whilst 8.3% (3) never attended any course or training in a year. These findings show that academic libraries provide opportunities for cataloguers to attend courses and training and the frequency of attending the courses is very much dependent on the cataloguers themselves. Some of them chose to attend certain course or training more than one time annually, while some attended because they were required to do so by their library management.

Table 7: Frequency attending of cataloguers course/training in a year

	Frequency	Percent
2 times	22	61.1
3 times	6	16.7
4 times	4	11.1
Never	3	8.3

Experience in industrial attachments

Respondents were also asked if they have gone for industrial attachments provided by their organizations. Experience in industrial attachments provides an opportunity to acquire new knowledge especially in cataloguing work. This can help to improve cataloguing skills and competencies. Table 8 shows that only 3 or 8.33% out of the 36 respondents had been sent on industrial attachment programs by their organizations. The 3 respondents reported their industrial attachments at the National University of Singapore for 4 days, the Manchester Metropolitan University Library for 2 months, and the Permodalan Nasional Berhad Library for 2 months. Other respondents reported that they only went for industrial attachments as part of the graduating requirements of their university programs mes of study.

Table 8: Cataloguers experience in industrial attachments

Experience in industrial attachments	Frequency	Percent (%)
Yes	3	8.33
No	33	91.67
Total	36	100
Never	3	8.3

Table 9: Respondent's responses towards the impact of courses /training/industrial attachments towards level of cataloguing competencies

Number	Before	After
1	Only have basic knowledge regarding the theories in cataloguing and cataloguing tools.	Gain more skills and experiences of doing cataloguing works

Number	Before	After
2	Do not have any knowledge of medical cataloguing.	Gain and improve cataloguing skills to catalogue medical library materials according MESH & NLM
3	Before training less familiarity with cataloguing tools and not very efficient in doing cataloguing works	Improve efficiency on cataloguing work
4	Lack of skills in doing outstanding cataloguing	Better skills and ability in doing cataloguing work after attended cataloguing courses by Cik Salmah Salleh
5	Not clear about cataloguing processes and policy	Obtain more understanding about the cataloguing processes and the policy and procedures applied
6	Less knowledge in cataloguing law materials	Improve and increase the skills in cataloguing and obtain more experience in doing cataloguing
7	Only have knowledge regarding the theories of cataloguing.	Have an in-depth understanding in cataloguing especially in the classification scheme
8	Less knowledge and skills in using the library system	Improvement using the system and gain experience in handling the materials

As shown in Table 9, respondents were asked open-ended questions about the impact of courses, training, and industrial attachments on their cataloguing competency. Only 22.22% (8) of the respondents replied to the question. They stated that they have experienced positive outcomes. The courses/training and industrial attachments were advantageous for them as they were more skilful in doing the cataloguing work. Some of them stated that they learnt new skills in cataloguing, such as cataloguing medical subject materials according to the Medical Subject Headings (MeSH) and the National Library of Medicine (NLM). This also included exposures to dealing with materials in the subject of law. Essentially, courses/training/industrial training attachments were very useful and very much needed to help cataloguers to raise their level of competencies in cataloguing.

Challenges faced by the cataloguers

Table 10 shows the number of multiple responses from 36 respondents, where 116 responses were identified, which suggest that each respondent had identified 3.2 types of challenges faced when doing cataloguing work. It can be seen that many of the respondents, i.e. 83.3% (30) stated that maintaining the quality of catalogue records is the main challenge in cataloguing work. The quality of catalogue records reflects on the quality of cataloguing work in a library's cataloguing department. Therefore this is a major challenge for cataloguers to be able to produce high quality catalogue records. The second highest response came from 55.6% (20) of the respondents who stated that the application of new technologies is a challenge faced by the cataloguers in doing the cataloguing work. Cataloguers need time to adapt to new technologies adopted in the library and this had different effects on their cataloguing works. The third highest challenge stated by 47.2% (17) of the respondents was cataloguing electronic records and resources, and the changing/migrating from one Automated Library System to another. When changing or migrating from one Automated Library System to another, cataloguers need to learn new skills to use the new system.

Table 10: Challenges faced by cataloguers cataloguing work

Challenges	Responses	
	N	Percent (%)
Changing to RDA	14	38.9
Cataloguing electronic records and resources	17	47.2
Maintaining quality of catalogue records	30	83.3
Application of new technologies	20	55.6
Learning new knowledge	10	27.8
Changing/migrating from one Automated Library System to another	17	47.2
Explosion of online content materials which pose a challenge to cataloguing work	6	16.7
Others ˙	2	5.6
Total of responses (N=36)	**116**	

Thus, it is considered as one of the challenges in doing cataloguing work. Changing to RDA as a new cataloguing tool received 38.9% (14) response from the respondents. This showed that the impending application of RDA does not pose a major problem for the cataloguers as they are always willing to learn new things when the need arises. 16.7% (6) of the respondents chose explosion of online content materials as a challenge, while only 5.6% (2) of respondents chose "other" challenges without specifying the issue.

In an open-ended question, respondents were also asked about the major problems that they faced when cataloguing, and only 14 respondents chose to reply. Table 11 showed that 4 respondents stated the major problem is related to the identification of the subjects of the materials. They also stated that assigning call numbers and subject headings are their main problems, whilst they also faced difficulties to ensure the call numbers and subject headings are appropriate so as to facilitate the search for information easily and accurately. This could be due to many factors, such as the lack of experience in doing classification work, the reliance on copy cataloguing data, and less knowledge in defining the appropriate subject for the materials. The findings also showed that major problems faced by cataloguers in doing cataloguing works are related to the library system, particularly when the library system is always pending and needs maintenance. Migration to another library system is also a major problem when carrying out cataloguing tasks.

Table 11: Major problems faced by cataloguers

Respondent	Major problems
1	Assigning call number and subject headings
2	Determine the subjects of the materials to catalogue
3	Instability in the library system. The system is frequently pending
4	Lack of knowledge of original cataloguing because most of the cataloguers choose to do copy cataloguing and affect the quality of cataloguing
5	Lack of knowledge in another language when cataloguing non-Malay and non-English materials
6	No problem
7	No problem
8	Problem in understanding the subject area of materials
9	Quality of catalogue records
10	Record maintenance
11	Time management because cataloguers also need to do other works
12	To ensure that the call number and subject headings are appropriate to facilitate the search for information easily and accurately
13	To migrate to another system
14	Too many cataloguing rules that need to be referred to for different types of materials

Other major problems that have been identified by the respondents are the lack of knowledge in original cataloguing, quality and maintenance of catalogue records and difficulty in cataloguing non-Malay and non-English language materials due to the lack of knowledge in other foreign languages. However, this list of major problems is only based on the perceptions of 14 out of 36 respondents; and therefore, this may not significantly represent a definitive list of major problems faced by the cataloguers when carrying out cataloguing tasks.

DISCUSSION

Cataloguing competencies

This study attempts to identify the core competencies for cataloguers in the Malaysian academic library environment. A total of 27 competencies were listed, based on those found in the literature. This includes 17 competencies related to cataloguing skills and 10 general competencies needed for high performance in cataloguing work. The findings of this study are based on the cataloguers' acknowledgement of the most important skills for them in order to be competent cataloguers. Therefore, in this research, competencies were listed based on the ranking of the mean scores gathered from the data as shown in Table 4. The competencies which the cataloguers believe is 'very important' for them is categorized as a crucial competency. The mean scores of *crucial competency* are from 4.44 to 4.61. These *crucial competencies* were selected based on the top highest mean scores.

The competency which the cataloguers believe is 'important' is categorized as a *required competency* to be competent cataloguers. The mean scores of *required competency* are from 4.42 to 4.31. This is considered as the required competencies because these have been ranked as the second highest mean scores which is at position sixth to the tenth.

The competency that the cataloguers rated 'of some importance' is considered as basic skills needed for good cataloguers. The mean scores for basic competency are below 4.30 which were indicated from 4.14 to 4.28. Lastly, when they rated that the competencies were 'of least importance' and 'not important', this indicated that those competencies were least required by the cataloguers in order to be competent in their cataloguing work. The mean scores are below 4.00 which were indicated from 3.14 to 3.94. Based on the findings obtained, the core competencies of cataloguers in academic libraries in Malaysia is listed in Table 12.

Table 12: Core competencies óf cataloguers in carrying out cataloguing work

Core competencies of cataloguers in carrying out cataloguing work	
Category	**Competency**
Crucial competencies	Ability to prepare and maintain a catalogue of the collections
	Ability to index the existing materials
	Ability to do original cataloguing
	Familiarity with and experience in using and handling cataloguing tools
	Familiarity with and experience in using classification tools

Core competencies of cataloguers in carrying out cataloguing work	
Required competencies	Ability to develop authority file for cataloguing
	Ability to utilize classification principles and organize materials according to the classification scheme
	Content analyses to determine class number and subject terms
	Ability to do copy cataloguing
	Require to possess subject knowledge of specific areas/discipline
Basic competencies	Cataloguing of non-print and specialized materials
	Knowledge of cataloguing resources and tools available from the Internet
	Knowledge for systems and instruments for cooperative cataloguing
Least required competencies	Knowledge of third language proficiency
	Ability in the use of Metadata standard scheme
	Knowledge of new cataloguing tools
	Ability to catalogue non-English and non-Malay materials

Cataloguers' competencies are based on their skills in doing cataloguing works. A competent cataloguer should possess the core competencies that are needed in their work tasks as being required by the management of the organization. This study revealed that the crucial competencies of cataloguers in the Malaysian academic library environment are the ability to prepare and maintain a catalogue of the collections, the ability to index the existing materials, the ability to do original cataloguing, familiarity with and experience in using and handling cataloguing tools, as well as familiarity with and experience in using classification tools. Bolin (2000) stated that the professional responsibility for the cataloguer is in the design of the catalogue and the maintenance of their contents. Maintaining the contents of the catalogue ensures the accuracy and currency of the information in the catalogue (Mifflin, 1991).

In Malaysian academic libraries, one of the competencies that is crucial for a professional to become a competent cataloguer is the familiarity with, and experience in using and handling the cataloguing and classification tools. Ellis (2008) maintained that the technical service managers in academic libraries were expected to have working experience with more than one classification schemes. A technical service manager must have the ability to perform classification work using the Dewey Decimal Classification and the Library of Congress Classification schemes. As a cataloguer, it is essential to be familiar with these tools as it enables the performance of outstanding cataloguing and classification work.

General competencies

In addition to identifying the core competencies of cataloguers in Malaysian academic libraries, other general competencies are acknowledged. The list of general competencies of cataloguers in academic libraries in Malaysia is illustrated in Table 13.

Table 13: General competencies

General competencies	
Category	**Competency**
Crucial competencies	Ability to work in teams
	Time management
	Use of computers and other information technologies
	Ability to negotiate effectively with others within or outside of the organization
Required competencies	Leadership and governance
	Supervising subordinate staff
	Organizing extension activities for the academic community
	Ability to learn effectively and continuously
	Ability to speak effectively in front of groups
	Ability to communicate effectively

General competencies were rated above 4 and it shows that these competencies are needed by cataloguers. However, respondents believed that general competencies of cataloguers can be categorized into two categories; i.e. crucial competencies and required competencies for which it is necessary to improve the quality of the cataloguer's work. Overall, the most important and crucial competencies that cataloguers should possess are the ability to work in teams, time management, the ability to use computers and other information technologies, and the ability to negotiate effectively with others within or outside of the organization. This crucial competency accounted for the mean scores of 4.14 to 5.00. Omekwu (2007) pointed out that in order to improve cataloguers' competencies in the global network environment; they must be the able to apply Information Technology in performing their jobs. Conversely, cataloguers also need to upgrade their ICT related facilities to ensure that the cataloguing division operates in a network environment that is truly global.

Other general competencies are considered as required competencies, based on the mean score of 4.00. Besides their main task of doing cataloguing work, cataloguers should also be able to do other tasks as instructed by management and this may require them to work in a team or teams. Cataloguers must be able to appropriately manage their time as they also have many other tasks assigned to them besides the cataloguing tasks. Good time management can have an effect on the quality and efficiency of a cataloguer's work. Accordingly, competent cataloguers should be able to manage their time according to their work tasks.

Approaches to enhance the competencies and the challenges faced by cataloguers

In order to develop and raise their competency level, cataloguers have attended personal skills courses organized by their libraries. These courses and training usually focus on the ability to work in a team and to develop the confident level of the participants. This kind of courses and training help them hone their communication skills. Based on a study by Kwak (2006), many librarians require job training, especially in dealing with the changing environment in academic libraries. Librarians need to deal with the use of automated systems such as the OPAC and the development of digital libraries. Kwak (2006) examined the kind of job training that cataloguing and classification staff had attended in order to deal with their current and changing environment in their libraries.

Some problems were raised by cataloguers regarding the classification works. First, they faced difficulties in assigning call numbers and subject headings. Second, they noted the problem of identifying the subjects of the materials, and third, the problem of ensuring the call numbers and subject headings has been appropriately assigned to facilitate the searching process. Therefore, classification training is the most frequently attended training by the cataloguers in academic libraries and this reflects the need for cataloguers to improve their skills in doing classification work. Hence, it is also found that in Malaysian academic libraries, competent cataloguers must possess the skills and capability to perform classification works.

Most of the cataloguers in Kwak's study who faced problems in the classification process in fact have less skills and familiarity with the subject knowledge and classification tools. However, most of the cataloguers in Malaysian academic libraries with different working experiences share the same belief in the kind of skills and knowledge that competent cataloguers should have.

From the findings, cataloguers stated that they need to attend and participate in a course or training organized by their libraries at least once a year. Nevertheless, some of them may attend more than two courses or training sessions in a year. This however, depends on the needs and requirements of the cataloguers themselves to improve their work performance and the quality of their work. This is a measure taken by the libraries to ensure that their cataloguers have been provided with sufficient training to do their work. Also, cataloguers can participate in various external courses in order to gain knowledge and skills in the field of cataloguing. This finding is supported by the study by Cloete, et al. (2003) who noted that the training of cataloguers forms an important part of the education and training of librarians since cataloguing is still considered one of the most important skills for organizing information. Kurshid (2006) reviewed the continuing education programs for cataloguers offered by various library schools, human resource development institutions, automation vendors, and professional associations in Saudi Arabia. His study also parallels the findings of this study as he concluded that employers should continue to provide support to cataloguers to participate in conferences, workshops, short courses, and seminars, and should also encourage them to engage in informal continuing education activities, including subscribing to focus lists on cataloguing, reading library science journals, and seeking membership in professional associations. One of the challenges in doing cataloguing work is the application of new technology in the library systems. The introduction of new technology will affect the process of doing cataloguing and the cataloguers need to learn new skills to adapt to the new technology. Puffer-Rothenberg (2003) discussed additional useful training in preparing staff for the system migration at Odum library at Valdosta State.

The migration will cause changes in the task workflow and the library staff need training to adapt to the new system.

RECOMMENDATIONS

Based on the study, it is recommended that more extensive training programs on cataloguing and classification work be made available on a regular basis. This recommendation is related to the problems and challenges faced by cataloguers, where the respondents stated that they face difficulties in the assignment of subject headings and classification numbers. Thus, cataloguers need to update their knowledge and continuously improve their skills in order to be able and competent to do cataloguing and classification works. It is imperative that cataloguers update their knowledge on the RDA, FRBR, and also the cataloguing of electronic records and resources. Knowledge about migration from one automated library system to a new automated library system and the application of new information and communication technology which pose a challenge to quality cataloguing work require specialized training programs meant for the cataloguers. Academic libraries must support the requirements for their cataloguers to attend courses organized by the libraries as well as those organized by other relevant organizations. It is also recommended that library schools in Malaysia conduct several cataloguing and classification training programs all-year round, so that full-time cataloguers can have access to refresher-type or update knowledge-type of training programs annually. The list of core competencies needed by the cataloguers in academic libraries in Malaysia as compiled through this study has provided a perspective of the skills and competencies for excellent performance of the cataloguers. Due to the limited sampling of this study, it is recommended that further research in this area should involve the public and private universities in the whole of Malaysia, to capture more data and information regarding competencies and skills of Malaysian academic library cataloguers.

CONCLUSION

This study has identified the core competencies that are needed by cataloguers in academic libraries in Malaysia. The core competencies were categorized into crucial, required, basic and least important competencies. In order to become highly competent, cataloguers should continue attend relevant and related training/courses provided by the organizations they serve. The challenges faced by cataloguers when dealing with cataloguing tasks proved that cataloguers need to continually be updated in their knowledge in the cataloguing field. A competent cataloguer is determined by the cataloguing core competencies possessed. Good cataloguers should also possess the general skills which are needed in a working environment. They must be able to possess this dual set of competencies in order to give their best in their tasks and work responsibilities.

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