

FOREIGN POSTGRADUATE STUDENTS AND THE ONLINE CATALOGUE AT THE UNIVERSITY OF MALAYA LIBRARY

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ABSTRACT

Describes a study, which investigates the Online Public Access Catalogue (OPAC) use behavior of foreign postgraduate students at the University of Malaya Library. This involves their ability to use OPAC, their knowledge about OPAC, and the reasons for the effective use of OPAC. The results indicate that most of the students from developing countries possess various levels of OPAC use abilities. Most indicate that there are no OPAC facilities in their home countries, and if available, it is limited to university libraries. OPAC searches are mainly for title, subject, author/title keyword, and author. Title searches are the most frequently used. Students using the University of Malaya Library indicate that the OPAC is relatively easy to use but students are moderately successful in locating items. Students self-trained themselves when using the OPAC. Most did not receive any training or learnt it from the Library and for those who attended the training programme, the majority of them noted that it has been successful. Most of the students are generally unaware of other facilities that are available in the OPAC.

Keywords: OPAC; Online public access catalogue; User study; University of Malaya Library; Postgraduate students; Foreign students; Catalogue use study.

ONLINE PUBLIC ACCESS CATALOGUE

There are a variety of definitions used to define the online catalogue but there is no one clear definition given (Norgard et al., 1993). Crawford (1987) defines the online catalogue as any computer-based set of bibliographic data that can be accessed by library users working directly at a terminal. Thus, for our purposes, we define the online public access catalogue (OPAC) as a computerized catalogue containing records of the items in a library or any institutional organizations, which is used for the storage and retrieval of information. OPAC searches today provide the following basic features; item searches through author, title, subject headings, call numbers, keywords and information about loans status and reservation (Lancaster & Sandor, 1997). Studies indicate that OPAC users do not always retrieve accurate information and do not search under the author, title, subject heading(s), and call number (Lynch, 1989 ; Chisman, Diller & Walbridge, 1999). In circumstances where patrons are

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unaware of other search techniques, there is a tendency for errors, which results in inefficient use of the OPAC.

As added features, some libraries will allow patrons to request items from another library through inter-library loans service provided via the OPAC. All OPAC allow patrons to view their library registration details and information about their borrowing privileges. The web-based OPACs provide connection to its various facilities via the Internet.

The online catalogue attracted a great deal of attention in the field of library science after research studies on its use began to appear in the literature in the 1980s (Chen, 1991) and grew in the early 1990's (Efthimiadis, 1990). Dale's (1989) review focused on subject access; Elsbened, Campbell, and Wesley (1990) provided a bibliography of OPAC instruction, and Pask (1990) compiled a bibliography on patron education for online systems covering the years from 1970 to 1988.

The Council on Library Resources (CLR) launched the first major research in 1982, with a national survey involving five organizations about the usage of the online catalogues in 29 academic, research, special, and public libraries in the United States (Markey, 1983). The results indicated that patrons mainly used the OPAC for subject searches.

Hildreth (1982) examined ten operational OPAC systems in terms of their computer-based features and recognised some barriers to the success of bibliographic information retrieval through the OPAC. These barriers include inefficient hardware, inadequate number of terminals, and indexing structure of the database.

Blecic, Dorsch and Koenig (1999) carried out a longitudinal study, on how the OPAC interface changed user's searching behavior and searcher success. They found that early changes to the introductory OPAC screen had a positive impact on users' online searching behavior and success as well as help to reduce some of the more common searching errors.

Chisman, Diller and Walbridge (1999) studied the usability of WEB-based and other library catalogues at Washington State University. They study found that library users are not always accurate in the retrieval of information via OPAC. Other research similarly showed the success of library users in obtaining materials, particularly via electronic tools to satisfy their information needs in an academic library (Ciliberti, Radford and Radford, 1998).

OBJECTIVES

The paper aims to understand OPAC using behaviour of foreign postgraduate students at the University of Malaya Library. The objectives of the study are:

- a. To investigate the foreign postgraduate students' ability in using OPAC;
- b. To examine their knowledge about OPAC;
- c. To discover the reasons that affect or reduce their effectiveness in using OPAC; and
- d. To present some proposals on how to increase users' effectiveness of using OPAC.

Subsequently, the study hopes to answer the following questions:

- a. Why do foreign postgraduate students use OPAC?
- b. What are the common types of searches used by foreign postgraduate students?
- c. What are the problems faced when searching the OPAC?
- d. How do the foreign postgraduate students learn how to use OPAC?
- e. Were foreign postgraduate students given any formal training on how to use OPAC?
- f. Do professional librarians play a role in imparting OPAC use skills to foreign postgraduate students?
- g. Are foreign postgraduate students aware of other facilities provided by OPAC?
- h. What other features would they like to see in OPAC?

METHODOLOGY

Sixty students were randomly selected from a pool of University of Malaya's foreign postgraduate students. Each was given a self-administered questionnaire and a total of 42 questionnaires were returned, giving a 70% response rate.

RESULTS AND DISCUSSION

(a) Respondents

The composition of the respondents is indicated in Table 1. About 88.1% of the respondents are master students and 11.9% of them are PhD students. Most of the respondents are in the second year of their programme of study (47.6%). This is followed by those in their first year (40.5%), third year (9.5%) and fourth year (2.4%) (Table 1).

The study shows that the respondents are from various countries scattered throughout the world, such as South Asia, South-west Asia, Africa, Europe, Middle East, Far East and Central America. Some countries use computers for their academic, administration, business and other requirements, while others are at the incipient level

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of computer technology usage. Therefore, when the respondents come to the University of Malaya, they exhibit a vast disparity of computer using skills.

(b) Availability of OPAC in Country of Origin

Most of the foreign postgraduate students (57.1%) indicate that there are no OPAC facilities in any of the libraries in their country of origin (Table 1).

Table 1: OPAC Availability in Country of Origin

Availability of OPAC Facilities	Level of Study		Count	Percentage %
	PhD	Master		
No	1 (20%)	23 (62.2%)	24	57.1
Yes	4 (80%)	14 (37.8%)	18	42.9
Total	5 (12%)	37 (88%)	42	100.0

About 94.4% of the respondents indicate that OPACs are mostly available in university libraries and this is in line with Hildreth’s (1985) findings, which noted that OPACs are generally available in academic libraries. Only one respondent noted that they have OPAC in their public library and another in an institutional library. Thus, OPACs are generally not available in their country of origin, and if available, it is confined to academic or educational libraries.

(c) OPAC Usage

The majority of the respondents (69.0%) had not used OPAC facilities in their country of origin before coming to the University of Malaya (Table 2). About 42.9% of the respondents state that they have OPAC facilities but only 31% have used OPAC before in their country of origin.

Table 2: OPAC Usage in Country of Origin

OPAC Usage in Home Country	Level of Study		Total	Percentage %
	PhD	Master		
No	1 (20%)	28 (75.7%)	29	69.0
Yes	4 (80%)	9 (24.3%)	13	31.0
Total	5	37	42	100.0

Table 2 also indicates the level of usage according to students’ level of study. More doctoral students have used OPAC than those in the Master programmes.

(d) Frequency and Type of OPAC Usage

It is interesting to note that all respondents (100%) have used UML’s OPAC for their academic requirements. Most of them use UML’s OPAC 2-3 time per week (33.3%), 1-2 times per month (31%), once a week (26.2%) and every day (9.5%). The

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majority of them use OPAC to locate book and journal titles (Table 3). In a similar study, Hsieh-Yee (1996) noted that 88% of her respondents used OPAC. Most library patrons prefer OPAC to the card catalogue because it is a timesaving device (Markey, 1984).

Table 3: Purpose for OPAC Usage

Purpose of OPAC Use	Count	Percentage %
To find book titles	34	81.0
To find journal titles	31	73.8
To check borrower's information	20	47.6
To find articles & conference papers	17	40.5
For renewals of items borrowed	13	31.0
Others - To find other materials	3	7.1
Others - To search other databases	3	7.1

The primary purpose of an online catalogue is to help users identify and locate items that may contain information pertinent to the user's present projects (Peters, 1991). Results of this study support this whereby, a total of 81.0% of the respondents use OPAC to find book titles and 73.8% of them use it to find journal titles. About 47.6% of the respondents use it to check borrower information and 40.5% of them to find articles and conference papers. Only 31% use it for renewal of items borrowed.

It is interesting to note that 90% of the respondents claim that UML's OPAC have helped in their studies. Most of the postgraduate students are required to conduct a search for their thesis, dissertation, or project and they have to refer to library materials. The UML's OPAC has helped them to accomplish this task.

(e) Ease and Difficulties in Using OPAC

The results showed that the majority of the respondents found that the UML's OPAC is easy to use. About 16.7% respondents note that it is "very easy to use". A further 47.6% found it "easy to use" and 35.7% found it "moderately easy to use".

There is a significant disparity between the novice users and the pre-experienced users on the ease of use of OPAC. About 85% of the pre-experienced users and 55% of novice users stated the OPAC is easy to use. Only 15% of the pre-experienced users claimed that the OPAC is "moderately easy to use".

About 47.6% of the respondents stated that they find the OPAC east to use due to the instructions in OPAC use given. The second reason is "guidance given before use" (35.7%) and "pre-usage of OPAC facilities" (23.8%).

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Some respondents do find difficulties in using the OPAC. About 31% “never used OPAC facilities before”. Other reasons given are “instructions in OPAC are not clear” (21.4%), “no guidance given before use” (19%) and “language difficulties” (16.7%).

(f) Success in Locating Items Through OPAC

Table 4 shows the level of success respondents indicated in locating items. In totality, 40.5% (successful and very successful) of the respondents indicate that they are successful in locating items through OPAC.

When comparing the users’ successes in locating items with UML’s training variable, results showed a great disparity between the trained group and the untrained group (Table 4). About 52.7% (very successful and successful) of the trained respondents state that they are successful in locating items compared to 30.4% (very successful and successful) of the untrained group. The majority of untrained respondents (47.8%) noted that they are “moderately successful”. Even for “no opinion”, the percentage (10.5%) of trained respondents is also less than the others (21.7%). Therefore, the availability of training has an effect on the success of OPAC use.

Table 4: Success in Locating Items

Level of Successful	UML Training		Count	Percentage %
	Received	Not Received		
Very successful	1 (5.3%)	1 (4.3%)	2	4.8
Successful	9 (47.4%)	6 (26.1%)	15	35.7
Moderately successful	7 (36.8%)	11 (47.8%)	18	42.9
Not successful	-	-	0	0.0
No opinion	2 (10.5%)	5 (21.7%)	7	16.7
Total	19	23	42	100.0

(g) Types of Searches

Table 5 presents a breakdown of the types of searches normally executed by respondents. About 93% of the respondents conducted title searches, followed by subject search (69%), author/title keyword search (66.7%), author search (64.3%) and call number search (21.4%). It is clear that known item searches are more popular. The result also shows that the postgraduate students frequently use OPAC with a reference list provided by their lecturers or supervisors. They also conduct unknown item searches through subject searches, followed by author/title keyword or author search. Sometimes they conduct subject search using a broader search term/terms and would receive a very large hit list.

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Table 5: Types of Searches

Type of Search	Count	Percentage %
Title Search	39	92.9
Subject Search	29	69.0
Author/Title Keyword Search	28	66.7
Author Search	27	64.3
Call Number Search	9	21.4

This study also shows that the University of Malaya's foreign postgraduate students prefer to conduct keyword searches rather than advanced searches using Boolean operators. Similarly, in Ensor's (1990) study, 80% of the users conduct keyword searching.

(h) Most Frequently Conducted Searches

Table 6 shows that the most preferred search is the title search. A total of 24 respondents stated that the title search is their first choice, 8 respondents had selected subject search, 6 selected author/title keyword search and another 4, selected author search as their first choice of searching type.

Table 6: Most Frequently Conducted Searches

Type of Search	Count				Percentage %
	1 st Choice	2 nd Choice	3 rd Choice	Total	
Title Search	24	2	5	31	73.8
Author Search	4	8	4	16	28.1
Subject Search	8	7	1	16	28.1
Author/Title Keyword	6	5	0	11	26.1

Table 7: Reasons for Selecting Search Types

Type of Search	Count	Percentage %
Title		
a. It will find a specific book which a user needs	19	45.23
b. It is used to find book titles that are recommended by lecturers	19	45.23
c. It is easy to use and find items quickly	18	42.85
d. Users have prior knowledge of item being searched	13	30.95
Author		
a. Author's name is easily remembered when compared to the title	9	21.42
b. First preference for choice of search is the author	1	2.38
Subject		
a. It is simple and easy to know about the books a user requires	9	21.42
b. It is easier to keep track of new books available at the library on appropriate subjects	4	9

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Respondents were asked why they had selected the above search options as their first choice. Half of them did not respond to this question. Others gave various reasons for selecting each of the search type as their first choice and this is listed in Table 7.

(i) How Postgraduate Students Learn OPAC Use

Postgraduate students learn to use UML’s OPAC through various methods. Table 8 shows that the majority of the respondents learn to use OPAC by themselves (66.7%) and this includes “via on-screen instructions available in OPAC”. Similar results were obtained in an earlier study conducted by Cherry and Clinton (1992). Thus, libraries should take efforts to ensure that on-screen instructions are available and easily understandable. The strong reliance on on-screen instructions underscore the importance of system interface, screen displays and message designs (Hsieh-Yee, 1996).

The rest of the respondents learn “from library staff” (64.3%). However, 61.9% did not learn to use OPAC through any formal library instruction programme. About 33.3% learn from friends and 28.6% use printed materials to learn about OPAC. Results thus indicate that they do not use one method per se to learn how to use OPAC. Therefore, they are less likely to learn from printed instructions or to get help from their friends.

Table 8: OPAC Learning Methods

Learning Method	Count	Percentage %
By your self	28	66.7
From library staff	27	64.3
Through formal library instruction programme	16	38.1
From friends	14	33.3
From printed instructions	12	28.6

Most of the respondents (54.8%) did not receive any formal training on use of OPAC from UML and only 45.2% indicate that they have attended formal training programmes from the library staff. The majority of the respondents (52.63%) who had received formal training from UML noted that the training programme is successful. About 36.84% say that the programme is “moderately successful” and 10.53% are “not satisfied” with the programme. A high proportion of respondents (90.5%) do not know about the other facilities available through the library’s OPAC. This would not be the case if they had attended a formal training programme.

CONCLUSIONS AND RECOMMENDATIONS

The OPAC is a very important component of any library system because most of the respondents stated that the system has helped them in their studies. Most foreign postgraduate students use it to find materials at least once or twice a month. However, they do not utilize the full features of the system since they are unaware of their existence. This is mainly due to lack of computer using skills and insufficient knowledge of the English language. Successful online catalogue searches are very dependent on a user's computer skills, his/her knowledge of OPAC features, and the system as well as language competencies.

Thus, it is recommended that :

(a) Librarians must try to instruct users in the fruitful, efficient, and proper ways of using the system (Peters, 1991). In order to use OPAC effectively, foreign postgraduate students should be aware of the system and this can be achieved through formal OPAC instruction programmes. The programmes should be conducted at two levels namely :

- Introduction programme - When foreign students come to the University of Malaya, an introduction programme that includes basic concepts of OPAC should be organized. Simplicity of this programme is essential since the students possess various levels of computer using and language skills. After this session they should be allowed to use OPAC until they are familiar with the system and the computer in order to reduce their technological fear. They should be given an adequate period for this process and before being exposed to the second phase of the programme.
- OPAC instruction session - This programme should focus on the skills of using OPAC such as advanced searching, various features of OPAC, and OPAC capabilities. Students could only attend this session when they are familiar with both the system and the computer. Skills such as data entry, subject knowledge, system knowledge and conceptualization skills should be included.

(b) UML should provide printed instructions on OPAC use. Generally, users do not use this type of instructions but when they are confused about using a system, they will fall back on printed instructions. Instructions should be given both in English as well as in the Malay language.

(c) Students should be advised and encouraged to seek help from librarians when using OPAC. Users tend to terminate search sessions early whenever they could not retrieve any significant results. Therefore, they may need help from an intermediary who can be a librarian.

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(d) Some of the foreign postgraduate students claim that the number of terminals are limited and should be increased. Most of the time students, especially the undergraduates, have to queue for the terminals. If the library can provide additional terminals, or separate terminals for postgraduate students, it would be very useful for them.

Most of the activities of the online catalogue such as reading, thinking, evaluating and deciding are not easily studied (Markey, 1984). This study used the questionnaire as the research instruments and therefore, the results are quantitative rather than qualitative. A further enhancement to this study would be its continuation as a qualitative study whereby the respondents can be interviewed and the users satisfaction or dissatisfaction can be probed further.

REFERENCES

- Blecic, Deborah D., Dorsch, Josephine L. and Koenig, Melissa R. 1999. A longitudinal study of the effect of OPAC searching behavior and searcher success *College and Research Libraries*, Vol. 60, no. 6: 515-530.
- Chen, Shu-Hsien Lai. 1991. *A Study of Online Catalogue Searching Behavior of High School Students*. Michigan: UMI Dissertation Service.
- Cherry, John M. and Clinton, Marchall. OPACs at five Ontario universities : a profile of users and user satisfaction. *Canadian Library Journal*, Vol. 49, no. 2: 123-133
- Chisman, Janet K.; Diller, Karan R. and Walbridge, Sharon. 1999. Usability testing: a case study. *College and Research Libraries*, Vol. 60, no. 6: 552-69.
- Ciliberti, Anne C.; Radford, Marie L.; and Radford, Gary P. 1998. Empty handed? A material availability study and transaction log analysis verification. *The Journal of Academic Librarianship*, Vol. 24, no.4: 282-89.
- Crawford, Walt. 1987. *Patron Access: Issues for Online Catalogs*. Boston, MA: G. K. Hall.
- Dale, Doris C. 1989. Subject access in online catalogs: an overview bibliography. *Cataloging and Classification Quarterly*, Vol. 10, no. 1-2: 225-51.
- Efthimiadis, Efthimios N. 1990. The growth of the OPAC literature. *Journal of the American Society for Information*, Vol. 41: 342-47.
- Ensor, Pat. 1990. Keyword/Boolean searching on an online public access catalogue : patrons and their perceptions. *Reports Research* : 143
- Elsbernd, M. E. R., Campbell, N. F. and Wesley, T. L. 1990. The best of OPAC instruction: a selected guide for the beginner. *Research Strategies*, Vol. 8, no.1: 28-36.
- Hildreth, Charles. 1985. Online public access catalogs. *Annual Review of Information Science and Technology*, Vol. 20: 233-85
- Hildreth, C. R. 1982. *Online Public Access Catalog: the User Interface*. Dublin, OH: OCLC.

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- Hildreth, C.R. 1997. The use and understanding of keyword searching in a university online catalog. *Information Technology and Libraries*, Vol. 16, no.2: 52-62.
- Hsieh-Yee, Ingrid. 1996. Student use of online catalogs and other information channels. *College and Research Libraries*, Vol. 57, no. 2: 161-175.
- Lancaster, F.W. and Sandor, Beth. 1997. *Technology and Management in Library and Information Service*. London: Library Association.
- Lynch, Clifford A. 1989. Large Database and Multiple Database Problems in Online Catalogs. In *OPAC s and Beyond: Proceeding of a Joint Meeting of the British Library, OBMIST and OCLC, 51-55*. Dublin, OH: OCLC Online Computer Library Center.
- Markey, K. 1983. Thus spoke the OPAC user. *Information Technology and Libraries*, Vol. 2: 381-387.
- Markey, K. 1984. *Subject Searching in Library Catalogs : Before and After the Introduction of Online Catalogs*. Dublin, OH : OCLC.
- Norgard, Barbara A.et al. 1993. The online catalogue: from technical services to access service. *Advances in Librarianship*, Vol. 17: 111-148.
- Pask, Judith M. 1990. *User Education for Online Systems in Libraries: A Selective Bibliography, 1970-88*. Metuchen, NJ: Scarecrow Press.
- Peters, Thomas A. 1991. *The Online Catalog: A Critical Examination of Public Use*. London: McFarland.