Use of Web-based Online Public Access Catalogue by the Foreign Students at the University of Delhi

Dr M. Madhusudhan
Department of Library and Information Science, II Floor, Tutorial Building, University of Delhi, Delhi-110007. Email: madhumargam@gmail.com

ABSTRACT

This paper investigates the use of Web based Online Public Access Catalogue (Web-OPAC) by the foreign students at the University of Delhi and enquires into their ability, knowledge, reasons for effective use, as well as problems faced while using the Web-OPAC.

The results indicate that a majority of foreign students come from developing countries and had not used Web-OPAC prior to coming to the University of Delhi. Most of the respondents used the Delhi University Library System (DULS) OPAC to find book titles only. The most popular search type is the title search and is also the first choice. The survey results show that the known item searches are more popular than the unknown item searches. Journal titles search, check borrower information, find articles, conference papers, for renewals of items borrowed, etc., features are unknown in existing DULS OPAC.The interface of DULS OPAC was too old and unattractive. Language is the most obvious difficulty faced by foreign students while searching the Web-OPAC. Most of the students had not received any training or learnt it from the library and for those who attended the training programme, a majority of them noted that it was successful. Most of the students are generally unaware of other facilities that are available in the OPAC. The paper focusses on many aspects of Web-OPAC, particularly those used by the foreign students at the University of Delhi. The findings of the study will certainly help the other university libraries in India to plan their Web-OPAC for effective use by their foreign students.

1. Introduction

Catalogues of an increasing number of libraries can now be searched online through OPAC which is a software of special importance to library users as bibliographic databases can be accessed alongwith printed indexes in a manner never seen before. The system includes a word-based search facility using Boolean operators that can narrow down a search to meet very specific needs. With the advent of the internet and World Wide Web (WWW), most library OPACs can be searched from any corner of the globe and it is called Web-OPAC. Through the Web-OPAC, users can access all types of materials in the library such as books, periodical titles, theses, audio-visual items, etc., and check whether these are available for loan or make reservations for them. The Web-OPAC also indicates circulation status and recent additions to the library. It allows multi-dimensional searches providing as many access points as the data elements depending on the underlying integrated library management system (ILMS) used which is "an advantage over the linear search provisions in the earlier form of catalogue" (Mehtab Alam and Amita, 2008). It provides pre-coordinated as well as post-coordinated phrase options. The amalgamation of different utilities and features clearly suggests, "The OPAC was probably the inspiration for many of the cutting edge services we find on the Internet today" (Fox, 2007). Some libraries allow patrons to request items from another library on inter-library loans via the OPAC. Patrons' library registration details and borrowing information is also available in the OPAC.

A consequence of the benefits of Web-based OPAC is, thus, broadened access. In turn, this implies a need for better understanding of the differences between users, their searching behaviour, and the capacity of good OPAC systems to manipulate and filter the available information to locate useful material effectively and efficiently (Kim et al., 1999). Therefore, the skills to obtain information from online systems such as the online catalogues are essential.

A number of studies have indicated that users have a very poor understanding of OPAC use (Millsap and Ferl, 1993; Cherry et al., 1994; Hildreth, 1997). Hildreth says "… users search more often by keyword, even though the search usually fails and they don't understand it". According to Ensor (1990), most users do not perform keyword searching and only half understand subject searching using Library of Congress subject headings. In particular, the necessity arises for a more comprehensive understanding of foreign students' preferences and searching of information in the Web-OPAC and interfaces of interactive system. Since the foreign students' requirements for use of Web-OPAC are potentially diverse and vast, the identification of foreign students' different preferences in using such systems will not only allow librarians to better help these users, but also assist system designers to produce better Web-OPAC systems.

2. University of Delhi

The University of Delhi (popularly known as Delhi University) is the premier university of India, established in 1922. Ever since its inception, a strong commitment to excellence in teaching and research has made the University of Delhi a role-model and path-setter for other universities in the country. Its rich academic tradition has always attracted the most talented of students who later on made important contributions to society. There are departments which have foreign students from different parts of the world such as Nepal, Sri Lanka, Iran, etc. The University has grown into one of the largest universities in India. At present, there are 16 faculties, 86 academic departments, 77 colleges, and 5 other recognized institutes spread all over the city with 132,435 regular students (Undergraduates: 114,494 and Post-graduates: 17,941) and 261,169 students

(Undergraduates: 258,831 and Post-graduates: 2,338) in non-formal education programme.

The University library, known as DULS is one of the oldest university library systems in India, comprising 15 libraries. DULS has become a trendsetter in university libraries in Delhi using Troodon, an Integrated Library Management System (ILMS) developed by Comtek Services Pvt Ltd, a Delhi-based private limited company established in 1991.[1]

3. Review of related literature

An OPAC is considered to be the heart of the library operations and gateway of library services as it facilitates patrons to various services of the library and acts as "an instrument of change in today's libraries" (Mulla and Chandrashekara, 2009). Web-based OPAC-use studies constitute a large body of literature, but studies on use of OPAC by foreign students is found to be meagre. Catalogues are the windows to the collection of the library, containing the bibliographic details of a particular document, which informs the user about the holdings of the library and gateway methods for providing access to library collections (Bordeianu, Carter, and Dennis, 2000). It is also an interactive search module of an automated library management system (Husain and Mehtab Alam, 2006). Fayen (1983), noted that the online catalogue provides atleast four features such as Boolean operators, keyword access, phrase searching, and truncation. Boolean operators are mostly used for online searching. OPAC allows simple as well as complex searches (Mehtab Alam and Amita, 2008).

Web-OPACs began to appear in the late 1990s and advances in traditional OPACs, especially in terms of remote access by users and their potential to integrate many document types and sources via a single interface (Babu and O'Brien, 2000), not only offer simplified access to library holdings for end-users but also enable librarians to add value to their catalogue data (Harmsen, 2000), which empowers users to get access to a wide variety of e-resources with a single sign-on the transition from the library OPAC (Khurshid and Ahmed, 2007). Significantly, the satisfaction level of users was high with the OPAC facilities. Nevertheless, not many users are aware of the expert searches provided by OPAC.

Chen (1991), divided search problems into three categories—unknown item search, known item search, and search errors. Cochrane and Markey (1983) pointed out users problems with some online catalogue features: (i) increasing the search result when too little was received; (ii) remembering what was included in the online catalogue; (iii) finding the right subject term; and (iv) decreasing the result when too much was retrieved. Blecic, Dorsch, and Koenig (1999) found that early changes to the introductory OPAC screen had a positive impact on users' online-searching behaviour and success as well as help to reduce some of the more common searching errors. Chisman, Diller, and Walbridge (1999), 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 using electronic tools to satisfy their information needs in an academic library (Ciliberti, Radford and Radford, 1998).

Other studies have focussed on user needs and problems, effectiveness of online searching (Peters, 1991; Cherry et al., 1994), success and satisfaction (Ciliberti, Radford and Radford, 1998), remote OPAC use, and user characteristics. Ariyapala and Edzan (2002), investigate OPAC-use behaviour of foreign postgraduate students at the University of Malaya Library and their ability to use knowledge and the reasons for the effective use of OPAC. This study was carried out with the help of this instrument with minor modifications.

[2] Comtek Services Pvt Ltd; for more details, please visit http://comtek-services.com/products.htm

Winnie, Cox, and Bussey (2009), identify features that international student users want incorporated in the next generation OPACs. This study was done to determine user suggestions for a typical OPAC application's functionality and features. An experiment was undertaken to find out the type of interactions features that users prefer to have in an OPAC. (Users involvement should be there while designing any OPAC System). Kumar (2011), evaluated the effect of web searching on OPAC users in the university libraries in India. This study found that ready access to information through search engines considerably increased the expectations of library users while searching OPAC. Web searching influenced their OPAC searching process greatly, as the majority of searches were performed on OPAC like popular search engines. Simultaneously, users did not know the difference between inner-workings of OPAC and common search engines such as Google.

Studies have also examined the effectiveness of training methods and training needs of online catalogue users (Nielsen and Baker, 1987), the correlation between search performance and type of experience (Fenichel, 1980), and the relationship between search success and searchers' attributes.

4. Objectives of the study

The paper aims to understand Web-OPAC using behaviour of foreign students at the University of Delhi Library, in particular to:

- Investigate the foreign students' ability in using OPAC;
- Examine their knowledge about Web-OPAC;
- Know the purpose of using Web-OPAC;
- Find out the most used method for searching the document;
- Ascertain the satisfaction with the information obtained from Web-OPAC;
- Identify the problems faced by the respondents in accessing the Web-OPAC; and

- Present some suggestions on how to increase users' effectiveness of using Web-OPAC.

The scope of the study is confined to use of Web-OPAC of the University of Delhi by the bonafide foreign postgraduate students and research scholars (MPhil and PhD) and their ability to use Web-OPAC. A survey was conducted through a structured questionnaire—randomly circulated personally among 100 foreign post graduate students and research scholars in University of Delhi—and the responses in the completed questionnaires. The response rate was 100 per cent during the survey period, i.e., 18–28 July, 2012. The responses received from the respondents to 18 questions are presented in four main sections in the form of tables and figures and analysed by using a simple method of calculation.

5. Data analysis and interpretation

A survey was conducted through a structured questionnaire circulated personally among 100 foreign students of the University of Delhi and all the questionnaires were returned, giving a 100 per cent response rate. The responses received from the respondents are presented in the form of tables and figures and analysed using a simple method of calculation.

5.1. Gender-wise distribution

Respondents' demographic characteristics such as gender and educational backgrounds have influence on use of Web-OPAC. Therefore, data relating to gender has been sought from the respondents, who were pursuing their higher education in the University of Delhi. Out of 100 respondents, males constitute 55 per cent while the remaining are females (45 per cent).

5.2. Level of study

The level of study was asked to determine if there are any differences amongst the various levels of postgraduate students' OPAC use. The aim of this question is to understand the foreign

students' educational background. Most of them who are pursuing postgraduate courses and research degrees at the University of Delhi come from developing Asian countries, such as Afghanistan, Bangladesh, Mauritius, Nepal, and Sri Lanka. Some of these countries do not have Web-OPAC facilities, and some of them have Web-OPAC facilities limited to university libraries only. Therefore, foreign students may exhibit vast disparity in their Web-OPAC-using skills. Figure 1 reveals that majority of respondents (50 per cent) are post-graduates, followed by MPhil (35 per cent). The remaining were PhD research scholars (15 per cent). The level of study was asked to determine if there are any differences amongst the various levels of foreign students' use of Web-OPAC.

Figure 1: Level of study (n=100)
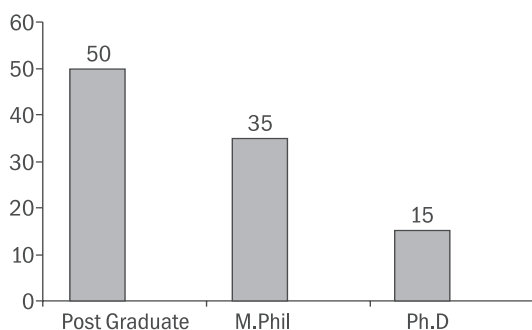
Faculty-wise analysis reveals that most of the respondents are from the Faculty of Arts (25 per cent), followed by the Faculty of Applied Social Sciences and Humanities (20 per cent), Faculty of Commerce and Business Studies (20 per cent), Faculty of Social Sciences (15 per cent), and other faculties in the University of Delhi accounting for 20 per cent.
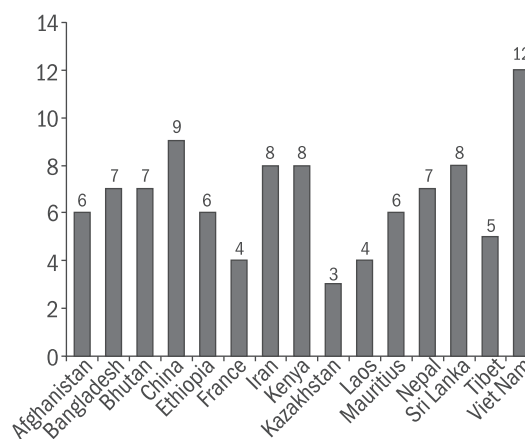
5.3 Country of origin

The aim of this question is to understand the foreign students' demographic background. Most of them who are pursuing their post-graduate courses and research degrees at the University of Delhi come from 15 countries

and mostly from developing countries. Figure 2 reveals that Vietnam has the highest students' percentage with 12 per cent, followed by Chinese with 9 per cent; Iran, Kenya, and Sri Lanka with 8 per cent each; and Kazakhstan with only 3 per cent of students.

As indicated in Figure 2, these countries are scattered throughout the world such as South Asia, South West Asia, Africa, Europe, Middle East, Far East, Central America, etc. However, almost all of these countries are developing countries which are at various levels of development. Some countries use computers for their academic, administration, business, and other requirements. But, some countries are at the incipient level of computer technology usage. Therefore, when the foreign post-graduate students come to the University of Delhi, they exhibit a vast disparity of computer-using skills.

**Figure 2:** Country of origin (n=100)

5.4 Availability of web-OPAC in country of origin

A question was asked to the respondents to ascertain the Web-OPAC facilities in their country of origin. The collected data clearly indicates that 65 per cent of the respondents declared that they do not have Web-OPAC facilities in their home countries. Only 35 per cent of the respondents said that they do have

Web-OPAC facilities in their home countries. The study also revealed that some respondents do not know whether Web-OPAC facilities are available or not in their country of origin. In the same country, some students said that they have Web-OPAC facilities while the others said that they do not have them. For instance, an Iranian PhD scholar indicated that they have Web-OPAC facilities in university libraries, but the Iranian PG students stated that they do not have them. This could be due to the following reasons: (i) Some of the libraries may have Web-OPAC facilities and some students do not know about this existence; and (ii) after their arrival at the University of Delhi, libraries in their home country may have had started to use Web-OPAC facilities in their libraries. About 80 per cent of the PhD research scholars stated that they have OPACs in their countries. However, the majority of the PG students (45 per cent) noted that there is no Web-OPAC facility in their home countries. Figure 3 indicates that 55 per cent of the respondents indicated that OPACs are mostly available in university libraries, followed by other libraries (20 per cent), school libraries (15 per cent), and public libraries (10 per cent). As indicated by Hildreth (1985), OPACs are generally available in academic libraries. However, the most admissible fact is that the OPAC facility is not available in a wide spectrum of libraries in the country of origin of the respondents and it is only limited to academic libraries.

Figure 3: Libraries having OPAC facilities in country of origin (n=100)
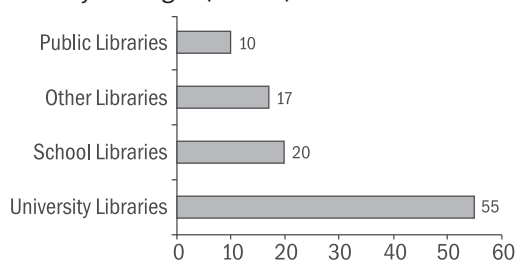

Source: WEB OPAC @ DULS: USAGE

5.5 Use of Web-OPAC

The respondents were asked about their use of Web-OPAC at the University of Delhi. It is interesting to note that while 65 per cent have used the DULS Web-OPAC, 35 per cent of them had not used the Web-OPAC facilities due to various reasons. This is not surprising, since the foreign students have to refer various types of materials for their academic/research requirements. They have to find book titles and journal titles and therefore, they have to use the library catalogue. The DULS uses the OPAC only. Consequently, foreign students have to use the DULS Web-OPAC.

5.6 Frequency of use of Web-OPAC

Usage is the most important and basic aspect with appraisal of the Web-OPAC and the frequency of Web-OPAC use reflects its value in the library. There are variations in the frequency at which the foreign students accessed the Web-OPAC. Some of them accessed Web-OPAC daily and some others occasionally. Figure 4 indicates that most of the respondents use the DULS Web-OPAC 2–3 times per week (40 per cent), followed by everyday (20 per cent), 2–3 times in a month (12 per cent), and once a week (8 per cent). Another 20 per cent respondents access the same occasionally. The DULS allows post-graduate students to borrow four books for 15 days and research scholars (MPhil and PhD) for 30 days. Therefore, there is no need to use Web-OPAC frequently. These figures clearly indicate that the DULS's Web-OPAC is most frequently used by foreign students.

Figure 4: Frequency of use of Web-OPAC (n=100)
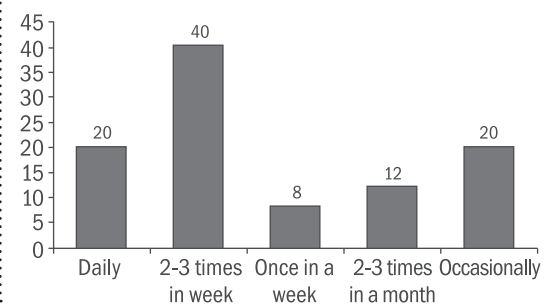
5.7 Place of access of Web-OPAC

A question was asked to know about the place of access of Web-OPAC from foreign students. Figure 5 clearly indicates that 45 per cent of foreign students of University of Delhi use Web-OPAC from their Department Computer Labs, followed by DULS Libraries (35 per cent), Department Libraries (30 per cent), Delhi University Computer Centre (DUCC) (20 per cent), and University Hostels (8 per cent). Only 2 per cent foreign students use the Web-OPAC from other places in the University Campus.

**Figure 5:** Place of access of Web-OPAC (n=100)
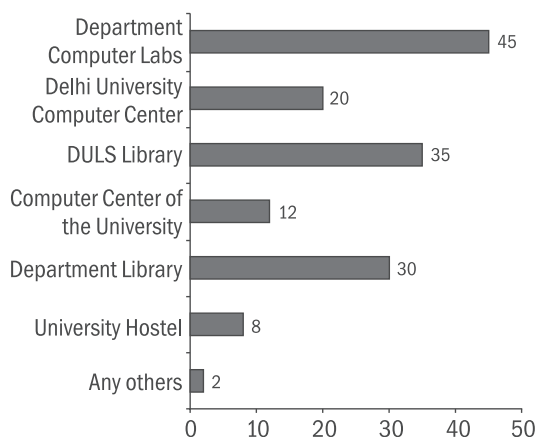
5.8 Purpose of using Web-OPAC

Web-OPACs have a wide variety of uses and purposes such as finding book titles, reserving books, renewing books, looking up borrowing status, etc. Even though the purposes are many and respondents use Web-OPAC for various purposes, the questionnaire provided seven major purposes with regard to the Troodon-Integrated Library Management System (ILMS)-based OPAC of University of Delhi. Figure 6 reveals that 55 per cent of the respondents used Web-OPAC to find book titles and 30 per cent of them used it to find other materials. About 25 per cent of the respondents had used it to check renewals of items borrowed and 10

per cent of them used it to check borrower's information and other purpose. Interestingly, none of the respondents searched other databases to the find journal titles, even if DULS's existing Troodon-based OPAC was unable to provide these items at present version.

**Figure 6:** Purpose of Using Web-OPAC (n=100)
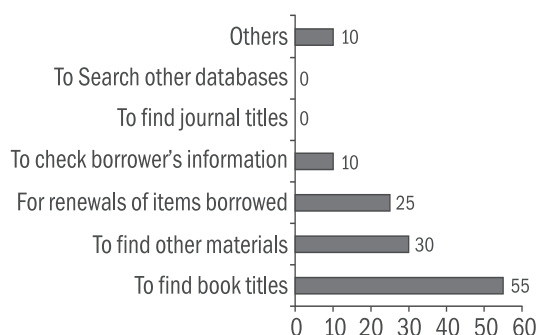
5.9 Type of search(es) used in Web-OPAC

A question was asked to the respondents about type of searches used in Web-OPAC. Figure 7 indicates that 64 per cent of the respondents conducted the title search. The second highest search type is subject search (53 per cent), followed by the author search (35 per cent), and other filed searches (10 per cent). Surprisingly, none of the respondents conducted author/title keyword search, and call number search.

It is clear that known item searches are more popular than unknown item searches. This shows that foreign students frequently use Web-OPAC with a reference list provided by their lecturers or supervisors. But they also conduct unknown item searches such as subject search, author/title keyword or author search. Sometimes they conduct subject searches using a broader search term/terms and receive a very large hit list. It clearly indicates that the foreign students are lagging in advance search techniques in the existing Web-OPAC system and need proper information literacy programmes for conducting effective searches.

**Figure 7:** Type of search(es) used in Web-OPAC (n=100)
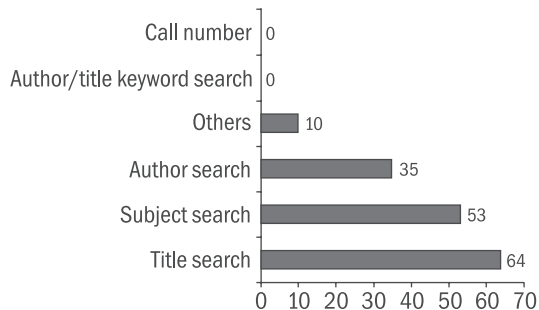
5.10 Most frequently conducted searches

A supplementary question was asked to know about the first choice searches in Web-OPAC from foreign students. Figure 8 shows that the most frequently conducted search is the title search. There are 68 respondents who stated that the title search is their first choice. Forty-four respondents had selected subject search, 35 selected author/title keyword search, and 13 selected author search as their first choice of searching type. It clearly shows that 68 per cent of the respondents conducted the title search most often. All other types of searches conducted were lower than the title search. Thus, as mentioned above, users tend to conduct the known item

searches most. Author and call searches were rated by 15 per cent of the respondents in total.

The author/title keyword search was rated by 35 per cent of the respondents. This also indicates that most of the foreign students used Web-OPAC for known item searches with given item lists.

Figure 8: First choice search(es) in Web-OPAC (n=100)
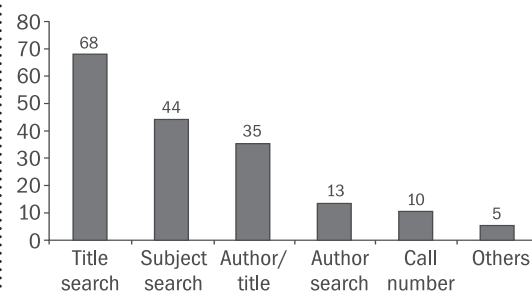
5.11 First choice of search option

Respondents were asked an open-ended question, i.e., why they had selected a particular search option as their first choice. While half of them did not respond to this question, others gave various reasons for selecting each of the search type as their first choice (Table 1).

Table1: Reasons for Selecting Search Types

Type of Search	Responses	Percentage
Title		
a. It will find a specific book which a user needs	38	38
b. It is used to find book titles that are recommended by lecturers	38	38
c. It is easy to use and finds item quickly because it matches the exact item	36	36
d. Users have prior knowledge of item being searched	26	26
Author		
a. Author's name is easily remembered when compared to the title because the author's name is usually shorter than the title	18	18
b. "First preference for choice of search is the author"	02	02
Subject		
a. It is very simple and easy to know about the books which a user requires	18	18
b. It is easier to keep track of new books available at the library on appropriate subjects	08	08

5.12 Ease of Use

Respondents were asked to ascertain whether Web-OPAC use is easy or difficult. The results showed that a majority of the respondents found that usage of Web-OPAC is easy rather than difficult. Data in Figure 9 reveals that 65 per cent found that the Web-OPAC is moderately easy to use. A further 20 per cent found it easy to use and 15 per cent respondents noted that it is very easy to use. The most important finding is that no one stated that the Web-OPAC is difficult to use.

Figure 9: Ease of Use
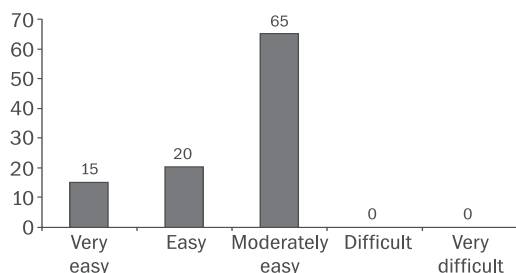
5.13 Difficulties in using Web-OPAC

This question seeks the difficulties faced by foreign students when using Web-OPAC. Few of the respondents (8) have not responded to this question. This could be due to the fact that they have indicated that they find the Web-OPAC easy, or moderately easy to use. However, some foreign students reported difficulties. Figure 10 reveals that the most obvious impediment is that they have language difficulties (76 per cent) while accessing the Web-OPAC, followed by the compliant that instructions in Web-OPAC is not clear (54 per cent), no guidance was given before use (42 per cent); and finally 22 per cent of the respondents noted that they had never used Web-OPAC facilities before this.

Some students have also indicated other difficulties such as lack of terminals (12 per cent) and mechanical problems (11 per cent). It was noted that they view the lack of basic computer skills as a mechanical problem. Two respondents said that they could not move from books database to member issue status and this could be due to: (i) language difficulties; (ii) never used Web-OPAC facilities before; or (iii) did not follow on-screen instructions.

Figure 10: Difficulties in using Web-OPAC (n=100)
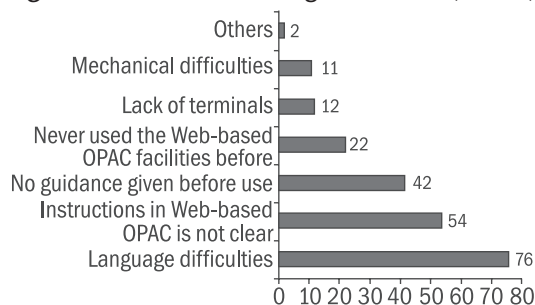
Source : WEB OPAC @ DULS: INTERFACE

5.14 Usefulness of Web-OPAC

It is interesting to note that 94 per cent of the respondents claimed that the DULS Web-OPAC have helped in their studies, while the remaining were unable to answer this question. Most of the foreign students are required to conduct a search in Web-OPAC for their project work, seminar presentations, assignments, dissertation, and thesis. Therefore, they have to refer to library materials, and the DULS Web-OPAC has helped them to accomplish this objective. However, they were not asked how the Web-OPAC has helped in their studies.

5.15 Attractiveness of DULS's Web-OPAC Interface

The interface design is an important factor that greatly influences success in Web-OPAC searches, as well as determining the type of search that may be conducted.

A question was asked to know about the attractiveness of Web-OPAC from foreign students. Figure 11 reveals that more than (76 per cent) of respondents stated that DULS Web-OPAC is unattractive, and only 24 per cent of the respondents noted that it is attractive. However,

in this case it should be remembered that a majority of the respondents are not familiar with any of the Web-OPAC interface before coming to the University of Delhi. Therefore, most of them do not know about other types of Web-OPAC interfaces which can be more attractive. Husain and Mehtab Alam (2006), suggested that a Web-OPAC serves an even more varied and diverse population, the interface must address the problems created by increasingly different skills and knowledge of the users.

Figure 11: Attractiveness of DULS Web-OPAC Interface (n=100)

Yes (24%)

No (76%)
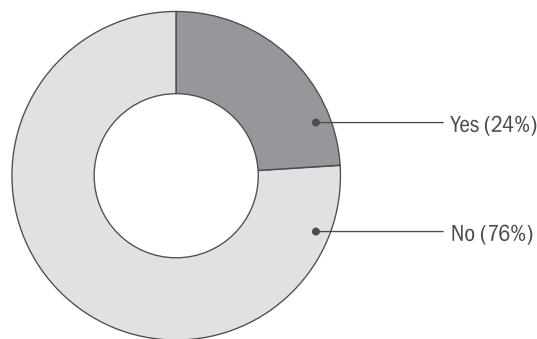
5.16 Reasons for use

Respondents were asked a question to comment why the Web-OPAC interface is attractive or otherwise. Forty per cent of them have not given any comments. Figure 12 indicates that the most obvious reason for using Web-OPAC is ease of use (23 per cent). Some of the respondents (19 per cent) indicated that the Web-OPAC interface makes it convenient to find books and other materials. The third reason is the quality of information which is provided by the DULS Web-OPAC (10 per cent). Only 8 per cent of the respondents said that the availability of Web-OPAC terminals were a reason for convenience usage.

Figure 12: Reasons for use (n=60)
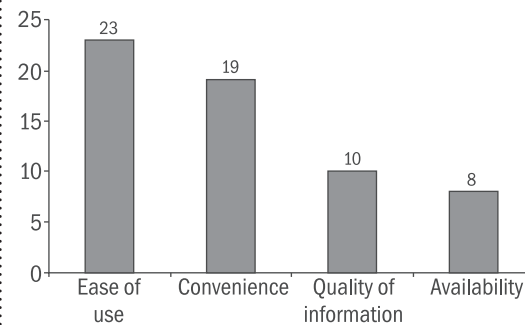
5.17 Reasons for not-use

A supplement question was asked to those respondents who had not provided reasons for use the Web-OPAC, i.e., 40 per cent. Table 2 depicts that most of them (35 per cent) claimed that DULS Web-OPAC interface is too old. Some respondents (30 per cent), especially the less experienced foreign students, noted that DULS Web-OPAC is unclear and difficult. These responses included "not colourful or require a more attractive interface" (15 per cent), and "display is not nice" (10 per cent).

There are inadequate responses to analyse other reasons, although two PhD scholars said that the existing interface should be modified with OPAC 2.0 features. According to Winnie, Cox, and Bussey (2009), the students expect that features in next generation OPACs should save their time, be easy to use, and relevant to their search. This study found that recommended features and features that can provide better navigation of search results are desired by users. However, Web 2.0 features, such as RSS feeds, commenting, rating, tagging, book suggestion based on loans, and those features which involved user participation were among the least popular. One student stated that it should be user friendly and use light background colours. Another PhD scholar suggested that the Web-OPAC interface should have functions similar to those of common search engines and hyperlinks to online information, but he failed to mention what online information is required. The

Table 2: Reasons for Not-use (n=40)

Sl. No.	Reason	Responses	Percentage
01	Web-OPAC interface is too old	15	35
02	Unclear and not simple	12	30
03	Not colorful or require a more attractive interface	06	15
04	Display is not nice	04	10
05	Other reasons	03	7.5

Source: *WEB OPAC @ DULS: TRAINING*

findings of this part match with another recent studies conducted by Kumar (2011). There was a tendency for students to consider that the screen layout is "important" for effective use of Web-OPAC.

5.18 Web-OPAC learning methods

Foreign students learned to use DULS Web-OPAC through various methods. Figure 13 shows that the majority of the respondents have learned to use Web-OPAC through guidance from their friends (55 per cent). They have also indicated that most of them (35 per cent) did not learn to use Web-OPAC through a formal library instruction programme, i.e., learning through trial and error method. A good number of respondents took guidance from the library staff (28 per cent). One-fourth of the respondents learnt from DULS website (25 per cent) and 24 per cent taken guidance from their teachers/research supervisors, Web-OPAC Page instructions (15 per cent), and through formal Information Literacy programme (12 per cent). Only 5 per cent of the respondents have used printed materials to learn about Web-OPAC. Interestingly, few respondents learnt with the help of family members and technical assistants in the computer labs (10 per cent).

Results, thus, indicated that they did not use one method to learn how to use Web-OPAC. They have used either one or more way/ways as alternative learning methods. Data suggested that the foreign students learn to use Web-OPAC by exploring the system by themselves, or from the

library staff. They are less likely to learn from printed instructions or to get help from their friends.

**Figure 13** Web-OPAC learning methods (n=100)
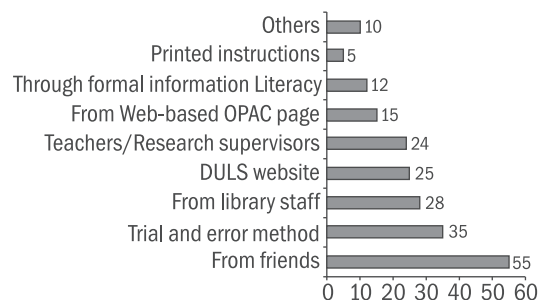
5.19 Web-OPAC training

A supplement dichotomous question was asked to examine whether the foreign students have received any formal training on using Web-OPAC in the DULS. Figure 14 shows that most of them (90 per cent) did not receive any training on use of Web-OPAC at the University of Delhi. Only 10 respondents (10 per cent) stated that they have attended a formal training from the DULS staff.

Some responses were inconsistent because respondents who had come from the same country, for the same course, have stated they have attended a training programme, while others stated that they had not received any training programme from DULS. Usually, DULS

organizes Information Literacy Programmes for such groups. The investigator verified this problem through six Afghanistan respondents. There are two respondents who stated that they have not received any training. They were asked the same question again and they stated that they had participated in a programme, but they had insufficient computer and English knowledge to understand it. They could not understand the programme and therefore, they had stated that they have not received any formal training from DULS. The other four respondents also revealed similar facts but they stated that they had received training.

Figure 14: Web-OPAC training programme (n=100)
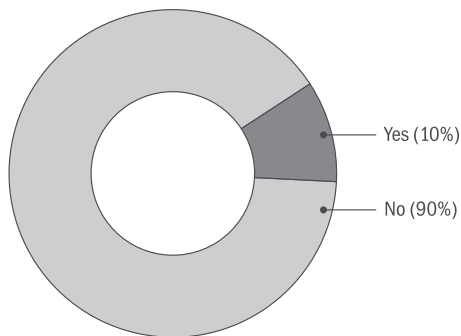
5.19 Success of the training programme

The minority of the respondents (10), who had received formal training from DULS, noted that the training programme was successful. As indicated in Figure 7, respondents were asked to rate the success of the training programme. Figure 15 reveals that four respondents (40 per cent) said that the programme was moderately successful, and two students (20 per cent) were not satisfied with the programme. Another 30 per cent noted that they were successful. Another one respondent (10 per cent) indicated that he was very successful. Overall, 40 per cent (successful + very successful) of the respondents indicated that they were successful of the programme. Therefore, the availability of training has not significant effect on the success of Web-OPAC

use. The above findings clearly indicate that there is a need to design a special formal Information Literacy Programme for foreign students in their native languages.

Figure 15: Success of the programme (n=10)
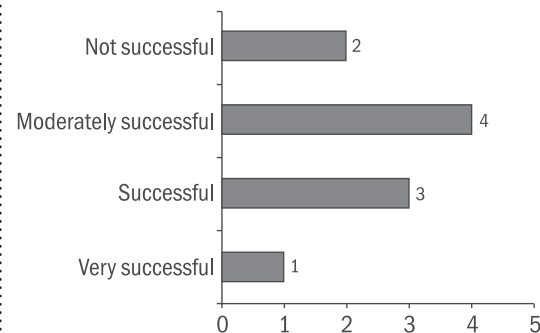
5.20 Users' suggestions and comments about Web-OPAC

An open-ended question was asked whereby the respondents had to provide suggestions for effective use of the DULS Web-OPAC. The top ten comments or suggestions received from the respondents were grouped and listed into common items. Table 3 reveals that the students, who have recently come to University of Delhi (previous students), claimed that they need an introduction programme on Web-OPAC. DULS organizes information literacy programmes for postgraduate students, research scholars, and faculty members and the reason for their claim could be the questionnaire was completed by the students before the instruction session began. One student commented "the session should be thoroughly explained and more practice is needed with the supervision of the librarian incharge of the training". Others proposed an increase to the period of training sessions.

Most of the foreign students who responded to this question suggested that they needed special training in multiple languages (85 per cent) and 65 per cent of respondents made suggestions for a change in the Web-OPAC interface. Many of them (40 per cent)

Table 3: Users' suggestions and comments (n=100)

Sl. No	Comment/suggestion	Responses	Percentage
1.	Special training in multi-languages	85	85
2.	Better interface	65	65
3.	Increase number of terminals for Web-OPAC	40	40
4.	Easy to find a material and save the time	25	25
5.	Printed handbook for Web-OPAC	24	24
6.	Need more features in Web-OPAC	24	24
7.	Separate terminals for foreign students	23	23
8.	Reservation of items online	18	18
9.	Interactive web-tutorials in different languages	16	16
10.	Others	04	04

Note: Multiple answers were permitted.

are unsatisfied with the number of Web-OPAC terminals available. One-fourth of the respondents commented that it saves their time. Twenty-four (24 per cent) students felt that if they have a handbook or manual on Web-OPAC use, it may be more useful for further use and expecting more advanced features in Web-OPAC. A good number of respondents (23 per cent) said they need separate Web-OPAC searching terminals. Another 18 per cent said that the Web-OPAC should have a feature which allows reservation of items online. A total of 16 per cent suggested that there should be interactive web-tutorials on Web-OPAC in different languages. Some Iranian students (4 per cent) noted the usefulness of using Persian language to present information in Web-OPAC.

6. Conclusion

This empirical study outlined the use of Web-OPAC—one of the most important and useful information retrieval tools in the university library—that requires future improvements in its design, interface, and features. Although based on a small-scale sample restricted to the University of Delhi environment, the findings of the study indicate that majority of the foreign students come from developing countries and have not used Web-OPAC before coming to the University of Delhi. Most of the respondents used the DULS OPAC to find book titles only. The most popular search type is the title search and also is the first choice. The survey results show that the known item searches are more popular than the unknown item searches. Journal titles search, check borrower information, find articles, conference papers, for renewals of items borrowed, etc., features are unknown in the existing DULS OPAC. A small number of respondents claimed that DULS Web-OPAC interface is too old and unattractive. Most of them did not receive any formal training to use Web-OPAC from DULS. Special training in multi-languages was the top-most suggestion received from the respondents for effective use of DULS Web-OPAC.

Based on the findings of the study, some suggestions for effective use of study Web-OPAC have been proposed. The existing Web-OPAC instructions programme should be well planned in three sessions: (i) Introduction programme; (ii) OPAC instruction session; and (iii) offer Web-OPAC training on a monthly basis, and offer these training sessions in English and foreign languages. Also, DULS should provide printed instructions on use of Web-OPAC in

English as well as in other foreign languages. DULS authorities may explore the possibilities with the Troodon-LMS vendor to improve the existing one or acquire new improved version of the ILMS with integrating features, such as federated search, meta search functionality, faceted navigation, visual map, the most popular ranking, word cloud, and refine menu features to attract more foreign students and as well as national students. In this collaborative age, the present-day Web-OPACs may incorporate the short message service (SMS)-based features in circulation transactions and RSS feeds to inform its users about new books and useful materials. DULS may design and develop flash-based interactive web-tutorials on use Web-OPAC in foreign languages.

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