Usage of Virtual Resource Centre of the Open University of Sri Lanka: Distance Learner Experience

H.P.S. Damayanthi Gunasekera [*]

ABSTRACT

The OUSL library is actively engaged in developing e- resources and facilities in order to meet the needs of distance learners since 2006. The results of the survey conducted to assess reasons of using VRC and use of web base library resources by distance learners are included here. Aim of the survey was to understand the strength and weaknesses of the service. Findings of the pattern of use of electronic information and information seeking behavior of the OUSL distance learners are also included in the article.

The key finding is that highest percentage of VRC users are from the faculty of Engineering. The main reason for using the VRC was to download information via Internet in order to write assignments. The main purpose of visiting the library website is to download articles and question papers. The major personal barrier to effective use of information and to access information in the Internet is lack of English language knowledge. The study recommends user training and adequate infrastructure within the university to eliminate the weaknesses related to the service providers as well as to the end users.

Keywords

Distance Learning, Library Support Services, E-Resources, Web-Based Library Services.

1. INTRODUCTION

The library of the Open University of Sri Lanka (OUSL) plays a major role in assisting the OUSL to achieve its goals in teaching, learning and research through its information service strategy. The role of the 26 regional and study centre libraries are servicing user needs, using facilities provided by modern electronic devices.

Information environment is changing enormously taking new approaches and practical solutions to meet the demand of the modern users. Hence, librarians as information providers, have to take necessary steps to move with modern technology. In order to meet the increasing demand, OUSL library submitted a proposal for developing a Virtual Resource Centre (VRC) in 2003. As a result of that VRC was opened for users in 2006 with the financial assistance of Distance Education Modernization Project (ADB project), aimed at achieving the following objectives:

- To provide a virtual access to the library and external resources and to deliver information through electronic media;

- To provide human resource development to enable the library to face the technological challenges of the information age. (Korale, 2003) - unpublished)

In this initiative, the planned activities for VRC were preparing, digitizing, archiving and providing access to historical and contemporary materials. Its e-resources and services are namely, digitized past paper collection, subscribed full text e-journal articles, e-newspapers, government e-publications, e-legal documents etc., subject related websites, digitized research abstracts, Internet browsing facility for educational and research purposes etc., web OPAC, over 100 free accessible URL index, Databases such as ERIC and GIS, distance education journal abstract service etc.

Remote learners can access those resources through intranet and www using computers available at VRC, through computer labs that are available at nearest Regional Centres, from their residences or from their working places. Any student who registered at any OUSL Regional Centre is allowed to use VRC. One hour period is allowed at a time to use VRC and they can reserve a time at the VRC counter or by calling and e-mailing.

2. LITERATURE REVIEW

There is a significant amount of related international research literature on use of virtual resources and barriers for utilizing e-resources.

2.1 Virtual resources and services

Many of those researches were conducted in USA, India, Canada etc. Several authors [(Deb and Kar 2003; Adams, 2003; Moyo and Cahoy, 2003)] discussed about the different online information services introduced to their users. Most popular services are Internet base services, teleconferencing, article alert services, web alert service, web base of resources, news flash services etc.

[*]Senior Assistant Librarian, Library, The Open University of Sri Lanka, P.O. Box. 21, Nawala, Nugegoda, Sri Lanka Ph: 940112772851. Email: hpsgun@ou.ac.lk

2.2 Reasons to use e-services

Moyo and Cahoy have done a survey research in 2003 at Penn State University, Pennsylvania, USA virtual campus students. The main objectives were to ascertain; virtual campus student's perceptions, expectations on web-based resources and support services, whether students met or unmet their needs, information-seeking behavior pattern of virtual campus students. Students have ranked following services on the basis of importance. 1. Web and email refers 71.3%, 2.remote access to full-text databases 65.1%, 3.home delivering of books and articles 60.7%. Findings further highlighted a need for increased promotion of the Penn State University Library services to remote users, as well as a careful analysis of existing services.

McMartin et.al. (2005) had done a research on "Factors motivating use of digital libraries in California using focus group discussion method and found that both online resources and web resources are equally useful. Participants have used different search strategies to find information to make lectures or assignments.

Franklin (2004) conducted a research on Library usage patterns in the electronic information environment and found that main purpose of using 75% of them were to access research articles. Adams and Ann (2005) have done a research in NeLH (the UK National Electronic Library for Health) digital library using four user groups. Researcher has used Grounded Theory method to understand the perceptions of respondents and found that 19% lecturers, 47% librarians and 15% clinicians have used online resources while 25% lecturers, 25% librarians and 14% clinicians have used web resources. It was also found that 58% lecturers, 28% librarians and 71% clinicians have used offline resources.

2.3 Barriers to access resources

Bernard (2003) has done a survey on Western Governor's University (WGU) virtual library and states the main barrier to wider use of web-based information resources is not technical but financial. Further, researcher has found that the difficulty of making payment for the copyright issues. Lack of consistency, variety of formats that makes them less ready to process, different license conditions, different user interfaces were other problems faced by service providers and users.

Major problem identified by Adams (2005) was "Lack of awareness about resources" by the users. He has used four cluster samples, clinicians, lecturers, patients and librarians and found that except librarians others have poor awareness about the facilities. Therefore, it is clear many respondents have not utilized resources much. Adams (2005) has identified that awareness is a key issue in digital library implementation as many past research studies have confirmed this problem. He has recommended starting different alert services to different users as a remedy for the problem.

3. OBJECTIVE

The objectives of this study were

- to find out the reasons for using VRC,

- to identify the purpose of visiting library web site,

- to examine problems faced in accessing and using E-resources at VRC.

4. METHODOLOGY

4.1 Problem of the study

One of the greatest challenges faced by distance librarianship today is providing library services to remote learners similar to conventional students. Because ACRL's Guidelines for Extended Campus Library Services (Caballero, 1998) as well as many literature states that "The parent institution is responsible for providing support which address the information needs of its extended campus programmes". In such a situation VRC was started in 2006 with the aim of enriching online resources to OUSL learners and to the academic staff. Most essential services were introduced and most relevant e-resources were offered through intranet and www. When compared monthly usage statistics (archival data) of VRC from January to June in 2008 which is illustrated in figure 1, the highest usage reported in January was 825 students while least usage reported in March. Many students have used the VRC at the beginning of the year and have decreased the usage in March and April. Later usage has somewhat improved in May and June. Hence, it can be said the VRC facilities are unutilized by most of the OUSL learners.
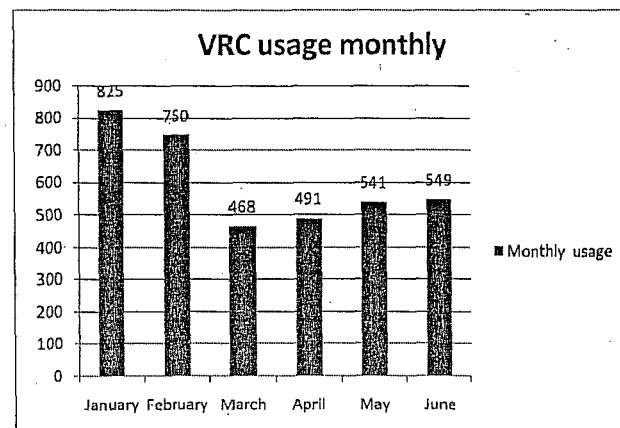

Figure 1: VRC usage

Because very few of them have used the VRC, when considering the fact that over 6000 registered students are at the Colombo Regional Centre. However, researcher tried to find out who were the VRC users, their real needs and main barriers rather than finding reasons for not using by many of them in this study. As service providers, we have not done any study during this three year period of time to evaluate given facilities and services to recognize strengths and weaknesses. Further, the necessity of doing a need assessment was felt to determine what tasks and search strategies have been added to the library today by users; tasks and strategies the VRC attract and how these user needs may best be served by the VRC. Due to lack of knowledge on availability of e-resources and lack of Internet searching skills, to date user needs are largely unknown although the services are being offered to users by the library. The general challenges that are faced by service providers, are the identification of correct "content", "user" and "strategies" before implementing additional services and facilities. Further, finding ways

to integrate the many different necessities of different faculty users into common form of integrated VRC services for online learning was another challenge faced by the service providers.

4.2 Research method

Survey method was used to collect data for the study. Research tools used to conduct this study were questionnaire, interview schedule and archival statistics available at VRC on its usage.

4.3 Sample of the study

Non-probability sampling method was used to select samples from the total population to collect data for the study. Students who came to use VRC on each day from 20th to 31st of August'09 were the samples of the study. 126 questionnaires were completed by Diploma and Degree level students. Two questionnaires were rejected as those were filled by certificate level students.

5. FINDINGS

5.1 Background information

It was found that total respondents comprised 64% of male and 36% of female users. Only 14% were employed while 86% were unemployed. 14% employed students were from Electrical Engineering and Civil engineering courses. Figure 2 shows the total response rate according to the subject wise. 46% of respondents were from Diploma in Technology and 36% of them were Bachelor of Technology.

Table 1: Frequency of usage of VRC faculty wise

Frequency	Faculty of Engineering	Faculty of Natural Sciences	Faculty of HSS
Every day	7	0	0
Once a week	42	16	0
Once a month	18	5	0
Once in three month	8	0	0
When there is a special need	24	13	11
Total	81	34	11

Further analysis was done to find out 'what were the special needs' of the distance learners and findings are illustrated in Figure 3. 55% of them have used VRC to download materials relevant to their subjects that they learn while 31% of them have used it to find answers for the assignment. It was also found that a less number of students have accessed the OUSL website.

5.2 Purpose of visiting VRC

The main purpose of visiting VRC (90% of students) was to access the internet and 5% of respondents mentioned that they use OUSL website. Besides, 5% students have used VRC for both purposes. Further, 'To access the elaborate websites' was given as another reason for visiting VRC by 12 students.

Those findings of purpose of visiting VRC were cross checked with the archival statistics from June to August 2009 given in Figure 4, to generalize the findings. As illustrated in Figure 4, archival data also prove that purpose of visiting VRC during these three months by the majority was to access the Internet.
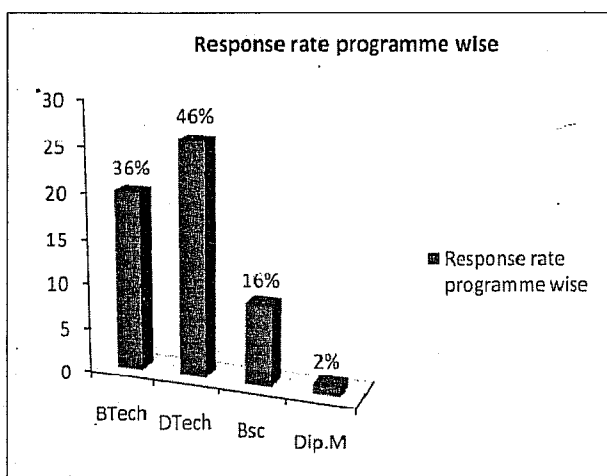

Figure 2: Response rate subject wise

It is noted that majority of users were from the Faculty of Engineering while least number of respondents were from Faculty of Humanities and Social Sciences. It is also noted that there was no one from the Faculty of Education. It was found that 42 students from Faculty of Engineering and 15 students from faculty of Science had used VRC once a week. As shown in table 1, general pattern of information seeking behavior of the OUSL distance learners is 'when there is a special need' only they seek information.
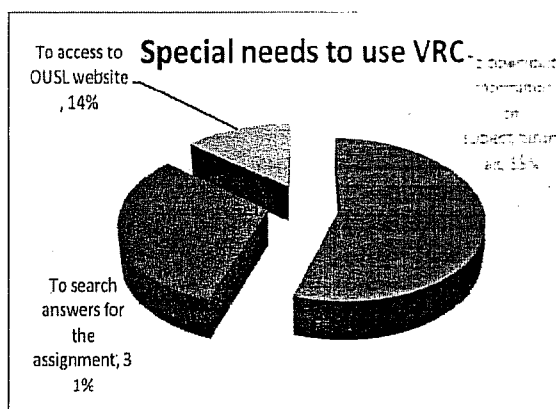

Figure 3: Special needs of the users

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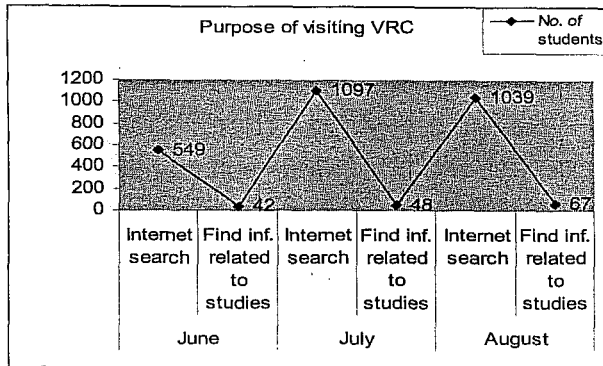

Figure 4: Purposes of visiting VRC

5.4 Purpose of using internet

Analysis was done to find out the main reason for using internet and 66 respondents said that they used Internet 'to find information to write assignments' while 26 students said that they were trying 'To find research articles'. 24 respondents have stated that 'To find information to write project report'. It is significant to mention that 10 students have accessed the internet without any aim as the facility is freely available.

5.5 Reasons to use website

OUSL library website is an important source that gives a lot of information for the remote learners. Hence, it is important to conduct a thorough study on it to find out whether website is useful or not and reasons for visiting it. Findings are given in Figure 5.

Accordingly, 37.5% of students have used OUSL website to access the online journals while 33% have accessed to visit past paper archival collection. A positive factor to mention is that 11.5% of them have accessed the OUSL webpage to check the results while 2.5% have accessed the virtual classroom. "To build up my knowledge & entertainment" and "to find the top job opportunities" were the other reasons given by users. It was noted that 20 students who follow Engineering programmes have used OUSL website to search online research articles. Understanding the barriers of the users is also very important to improve the services and facilities given to the remote learners. Barriers were studied under four categories such as technical, institutional, personal and informational barriers and findings are listed in table 3 numbering highly affected barrier as 1.

It was found that institutional and personal barriers have affected mostly than other barriers when using VRC by majority of students.
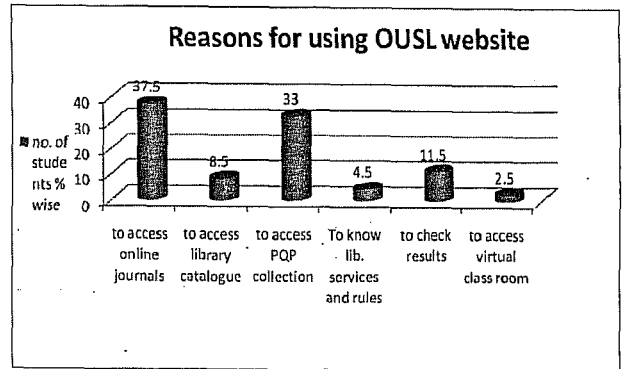

Figure 5: Reasons for using website

Table 3: Barriers faced by the VRC users.

Type	Barriers
Technical barriers	1. Network is slow/Frequent Network failure/Network get stucked
	2. Computer viruses are there at VRC computers
	3. Some computers are very very slow and some icons are out of order and
	4. Operating systems are not installed in most of the computers.
Institutional barriers	1. Available computers are not enough
	2. Time period is not sufficient
	3. Two computers for email checking are not enough
	4. Emails are blocked
	5. AC cool is very high and difficult to stay
Personal barriers	1. Lack of English Language knowledge
	2. Cannot reach target
	3. Unable to adjust time due to employment
	4. Sometimes do not know relevant/different URLs at that time one hour is not sufficient
Information barriers	1. Necessary information are not available
	2. Necessary information are available but not free
	3. Cannot sufficiently filter particular information from large queries.
	4. Do not know about availability of facilities"

6. DISCUSSION

It was revealed that majority of students who used VRC were from Faculty of Engineering while least number of users were from Faculty of Humanities and Social Sciences. It was also noted that there was no any user from Faculty of Education.

There was no similar pattern of information seeking behavior of OUSL learners. Findings reveal that OUSL learners have different needs and they do not come the library regularly. They seek information only when they need it. Therefore, it is better to understand OUSL learner needs, skills, wishes, clearly analyzing different aspects as their characteristics are not similar, before implementing e-services and facilities.

The main purpose of visiting VRC by 90% of students was to access the internet 'to find information to write assignments' and only 5% of them have visited OUSL website. It is observed that OUSL website is not popular among distance learners. Sometimes it may be that, users do not know about the resources available at the web, special relevant web sites listed there, webographies that gives direct links for specific information effectively. As Adams (2005) identified and confirmed conducting awareness sessions to users is a remedy for the problem.

Students always try to find information that they need without using direct links to resources. This attempt may waste time and money because Internet is money. OUSL service providers have same experience of financial problems as Bernard (2003) faced at WGU. As service providers li-

brarians have to think that part also and must take steps to familiarize the OUSL web facilities or to provide internet searching skills training which helps to save the time of the user as well as the electricity and other bills. The other reason of accessing Internet was to find information to write project report'., It is vital to have an idea regarding the projects assigned to learners from the Engineering faculty academics before developing e-resources and information. The main purpose of visiting OUSL website was to access the online journals and the past paper archival collection. It is an encouraging factor to observe that 11.5% of them have accessed the OUSL webpage to check the results while 2.5% of them have accessed the OUSL site virtual classroom. Four categories of barriers namely technical, institutional, personal and informational that affected the usage of VRC and its resources were identified in this study. Network is slow/network failure was the main technical barrier while institutional barrier was 'available computers are not enough'. In addition to that users have requested to increase the allocated time period per person from one hour to two. This matter also should be considered by the service providers as it is a main Institutional barrier. Majority have not been able to collect the required document/information from the search due to English language barrier. Main information barrier was necessary documents are not available in the internet and some are not free and it is for a fee. These findings also ensure service providers that they need some assistance when they search information. VRC staff mentioned at the interview that even though they are ready to help, the users, do not request any help from them.

7. RECOMMENDATIONS

It is highly recommended that:

- Familiarization programme on VRC should be conducted at Faculty of HSS and Education.

- OUSL library Web-based resources should be evaluated and increased and popularized among students.

- Persuade users to use VRC by linking most relevant e - resources and introducing new services relevant to each Faculty programme.

- A course on Internet searching skills considering all the aspects that cause problems when accessing information, should be introduced to avoid the barrier of using Internet effectively.

- More subject wise webographies should be prepared to inform users where the areas/search engines or URLs with relevant information is available in their subject areas.

- Printed version of reference guides to e-resources and guide to internet searching skills should be made available at VRC for easy reference as learners do not visit the university regularly.

- Increase time period from one hour to two hours which enable users to download adequate resources.

- Conducting another research study to find out the library faculty partnership when developing e-resources as majority of VRC users were from Faculty of Engineering.

- To increase the number of terminals to more users.

- Further research study on information seeking behavior of Internet users was also highlighted.

8. REFERENCES

[1] Adams, A. and Anne. B. 2005. Digital library support for the user's information Journal In Proc. ACM/IEEE JCDL 2005. 160-169

[2] Bernard, J. 2003. Web accessible library resources for emerging virtual universities.32. DOI=http//www.westga.edu

[3] Caballero, C. 1998. Thousands still access library services in support of distance education a case study. J. of Lib. Services for Dis. Edu. 1/2 (June 1998),1096-2123 DOI= www.westga.edu

[4] Deb, S. and Debal C. Kar. 2003. Electronic library a TERI experiments, ASIS&T Annual Meeting Humanizing Information Technology from Ideas to Bits and Back, October 19-20. California

[5] Franklin, B. 2004. Library usage patterns in the electronic information environment. Electronic Journal 9(4), 128-135

[6] Korale, S.R. 2003. Establishing a vibrant high tech E-library at OUSL to support academic research and distance education needs in the 21st century. project proposal submitted to the DEMP project (unpublished)

[7] Moyo, L. M. and Cahoy, E.S. 2003. Meeting the needs of remote library users. Library Management. 2.6.7 281-290.

[8] McMartin, F., Ellen, I. and Alan, W. 2005. Factors motivating use of digital libraries. 254-255. DOI= http://digital.library.wisc.edu/1793/35653