Awarness and Use of Open Access and Free Resources on the Internet: A Case Study at BITS Pilani K K Birla Goa Campus, Goa

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Abstract

The Internet is a huge source of free and openly available information. However, the awareness about the availability of such free and open source information amongst members of the academic community is not clearly known. This aspect was studied using a structured questionnaire and the data recorded through the survey was analyzed. The results reinforce the commonly held belief that the academic community is largely unaware of these vast and freely available resources. The study also points out the role a librarian can play in imparting awareness through information literacy sessions from the library.

Keywords: Internet Resources, Open Access, DOAJ

1.   Introduction

Internet is one of the wonderful inventions of the modern era. It has revolutionized our society, our economy and our technology. Internet is a large network of networks, where knowledge is shared. In simple words, the Internet can be described as a worldwide collection of computer networks, cooperating with each other to exchange data using common software standard (Kahn and Vinton 1999). It can also be considered as a gigantic encyclopedia of information.

The web pages available on the Internet carry tremendous volume of information which is available across the globe, thereby turning the globe into a village. Much of the information on the Internet is available for free access. Wikipedia, the website that collects and organizes the collective wisdom of many is a good example of this type. There are reference sources like free online dictionaries, directories, online theses and dissertation databases. Many of them are academically very important. The new concept of Open Access has caused a revolution in the scholarly publishing scenario. The escalating cost of journal subscriptions and diminishing library budgets have caused 'Serials Crisis' in the field of scholarly communication. To overcome this hindrance, many academicians resorted to publication of their articles in sites which are 'open' for all and free of cost. The Open Access Journals and Open Access Repositories are the products of this outlook. The Directory of Open Access Journals (DOAJ) is growing day by day with the addition of new titles to its index. Similarly, there are many knowledge spots on the Internet such as the Directory of Open Access Repositories (DOAR), Open J – gate, Project Gutenberg and ERIC database. These are only a few examples of the numerous sources that provide academically sound and reliable information.

Thus, while on the one hand there is an ever-increasing body of knowledge on the Internet, on the other hand, there exists a serious question about its awareness. What percentage of the academic

community is aware of these highly reliable sources of information? If they are not aware, who is responsible to make them aware and what are the methods by which it can be done?

The objective of the present study was to assess the awareness about free and Open Access resources among the members of an academic community that has the privilege of maximum access to the Internet. Birla Institute of Technology and Science is an all India university established under section 3 of the UGC Act. BITS – Pilani K. K. Birla Goa campus is one of the three campuses of BITS in India. It offers B.E. degrees in 5 branches of engineering, M.Sc. in 6 disciplines, 5 M.E. Degree Programs and Ph.D. Programs. The campus is Wi-Fi enabled and access to the Internet is available to all in the campus.

A group comprising faculty and students of the BITS Pilani K. K. Birla Goa campus was the sample for the study. A structured questionnaire was administered among the 250 members of the sample. The empirical data collected through the questionnaire was analyzed and the results are presented in the form of generalizations. It has given a very clear idea about how an academic community seeks information available on the Internet.

2. Profile of Respondents

The survey to assess the awareness of the academic community about the free and Open Access Resources (Internet web sites) was conducted among the students and faculty of the BITS Pilani K. K. Birla Goa Campus, Goa. The survey was answered by 250 members of the academic community in this campus.

Table 1: Academic status of the respondents (Gender wise)

Academic Status	Gender			Total
	Male		**Female**	
Degree student	116		51	167
	65.91		68.92	66.80
Post graduate student	27		10	37
	15.34		13.51	14.80
Faculty Member	33		13	46
	18.75		17.57	18.40
Total	176		74	250
	100		100	100

It consisted of 167 (66.80%) degree students, 37 (14.80%) postgraduate students and 46 (18.40%) faculty members. This was a real cross section of the academic community at the BITS campus. A

structured questionnaire was administered among the students and faculty who had visited the library of the BITS Goa campus during February 2010. Almost all of the respondents were curious to know about the concept of Open Access. Even though many of them were using the Open Access Internet websites they were unaware of the concept of Open Access. A gender wise analysis shows that the sample consisted of 176 (70.40%) male and 74 (29.60%) female respondents.

3. Preferred source of Information

The first question in the questionnaire was about the preference of sources of Information. The academic community uses various sources of information for their information needs. These include books in the library, books in their personal collection, the Internet and to an extent peers which include friends, faculty and colleagues. Even though many information sources in various formats are available people tend to use or choose a particular source of information at the first instance. It can vary depending upon the people and circumstances. But with the advent of the Internet and its ubiquitous availability many choose the Internet as a dependable first source of information. This was tested through a question among the present sample under study. The responses are tabulated in Table No 2.

Table 2: Preferred First Source for Information (Academic Status Wise)

Sources of information	Academic status			Total
	Degree student	Post graduate student	Faculty Member	
Printed reference Books in the library	50	10	10	70
	29.94	27.03	21.74	28.00
Books in the personal collection	11	7	8	26
	6.59	18.92	17.39	10.40
The Internet	101	20	26	147
	60.48	54.05	56.52	58.80
Friends and teachers	5	0	2	7
	2.99	0.00	4.35	2.80
Total	167	37	46	250
	100	100	100	100

The analysis of the data reveals that the Internet is the most preferred first source of information for the academic community under study. As many as 101 (60.48%) degree students, 20 (56.52%) postgraduate students and 26 ((56.52%) faculty members are biased towards the Internet as their

first source of information. Books in the library are still being considered as a first source of information by another major group of respondents. This includes 50 (29.94%) degree students 10 (27.03%) postgraduate students and 10 (21.74%) faculty members. The data further shows that these numbers are almost half the number of those who opt for the Internet as the first preferred source of information. When 147 respondents chose the Internet as their first source of information 70 respondents chose library books as their immediate choice for information. These figures show that in spite of the invasion of the Internet as the preferred source of information, libraries still have a role to play in a conducive academic atmosphere.

4. Preference for Media

Though information is generally disseminated through the print as well as the digital media, it is a well-known fact that the libraries themselves have undergone intricate transformation due to invasion of digital media. The traditional libraries have got transformed to hybrid libraries that handle both media. Online and offline digital information sources are now part of any library. The digital sources of information have added advantages of interactivity that is facilitated through cohesion of multimedia elements. The highly interactive encyclopedia CD-ROMs are usually preferred to the multi volume encyclopedia in print form. .

It is by and large easier to locate information in digital formats rather than in print formats. This was also tested using a query in the questionnaire. The data shows that in-spite of the advantages the digital media has over the print media, respondents were in favor of access to both media. . Figure No 1 shows the number of respondents and their preferred choice of media.
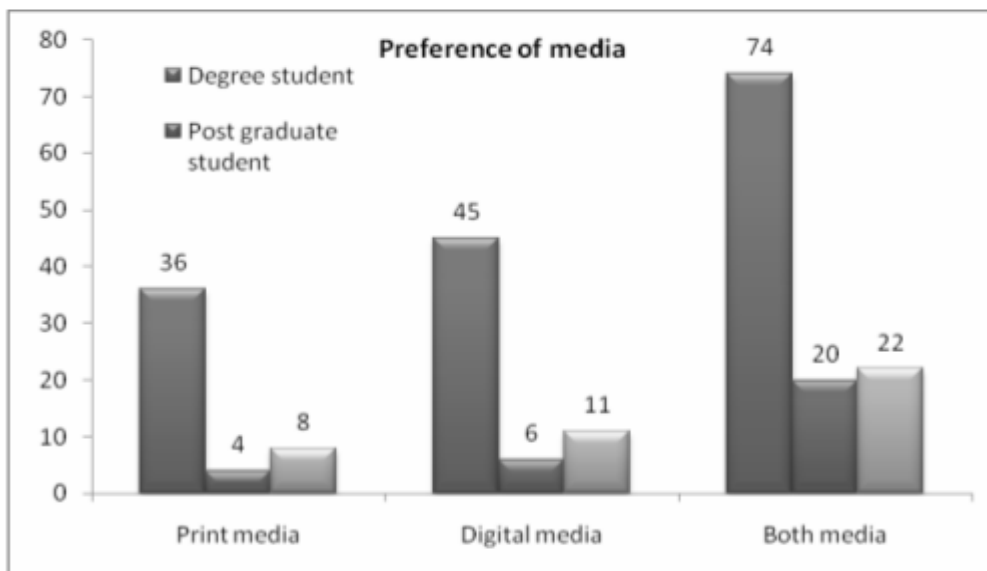

Figure 1: Preference of Media

Majority of the respondents showed a marked preference for both forms of media. Majority of the degree students i.e. 74 have given first preference to the availability of both media. Similarly majority of postgraduate students and faculty members also have indicated their preference to that option.

5.   Use of the Internet

The Internet has developed into a major source of information as well as an important media of communication. It has changed the world into a global village. The barriers of time and distance have been totally removed by this network of computer networks. Even a computer savvy person could find it difficult to access the abundant information available on the Internet; a layman could be totally at a loss to access the mounting wealth of digital information, lending credence to the curious case of the digital divide. The academic community, however, cannot avoid the use of the resources on the Internet. Hence we need to find out how far the academic community is using the Internet and the reason why they use it. A question was asked to know about the frequency of use of the Internet. The data collected is tabulated in Table No. 3

Table No. 3 Frequency of browsing the Internet (Gender Wise)

Frequency of browsing the Internet	Gender		Total
	Male	**Female**	
Daily	160	62	222
	90.91	83.78	88.8
Every alternate day	3	2	5
	1.70	2.70	2.00
Once in a week	0	3	3
	0.00	4.05	1.20
Once in a fortnight	4	0	4
	2.27	0.00	1.60
As and when required	9	7	16
	5.11	9.46	6.40
Total	176	74	250
	100	100	100

The table reveals that majority users (88.8%) access the Internet every day. This data more or less reflects the usage of the Internet in academic institutions all over the world. However, a slight difference in gender-wise usage of the Internet is noticed. The percentage of women using the Internet daily is slightly lower than their male counterparts in the campus. As many as 9.46% female respondents are using the Internet as per their requirement only.

Since it is important to understand the purpose of using the Internet, the survey included a question on the purpose of use of the Internet. The empirical data received is shown in the Figure No 2 below.
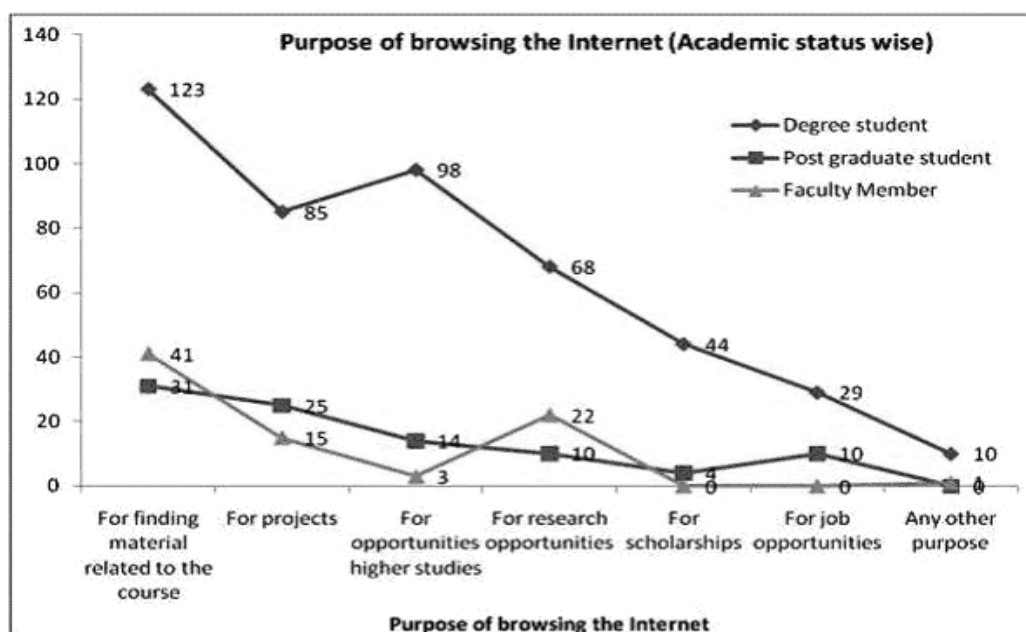

Figure 2: Purpose of browsing the Internet (Academic status wise)

The figure shows that the majority of the academic community uses the Internet to find material related to the course. Degree students and postgraduate students browse the Internet to get updated with opportunities for higher studies. Faculty members show some interest towards research opportunities available on the Internet. The figure depicts a general profile of an academic community.

6. Awareness of Open Access Information Sources

There are a large number of free and open information sources that offer huge amount of academic and research information on the Internet. The website www.doaj.org itself is the best example of such a source. It is a platform where any person anywhere on the globe can have free and open full text access to more than 5000 peer-reviewed online periodicals. The case of Wikipedia as a free source of information is known to everyone. Many reference web sites such as www.freedictionary.com, www.encyclopedia.com and www.Intute.org are also available. Some of the universities are now making their thesis available on the Internet. The Mahathma Gandhi University at Kottayam, Kerala has come out with the Open Thesis Program under the url www.mgutheses.org. But the pertinent question is how far the academic community is aware of the existence of such websites. This was examined through a question. The data available for this is provided in the form of Figure No 3.
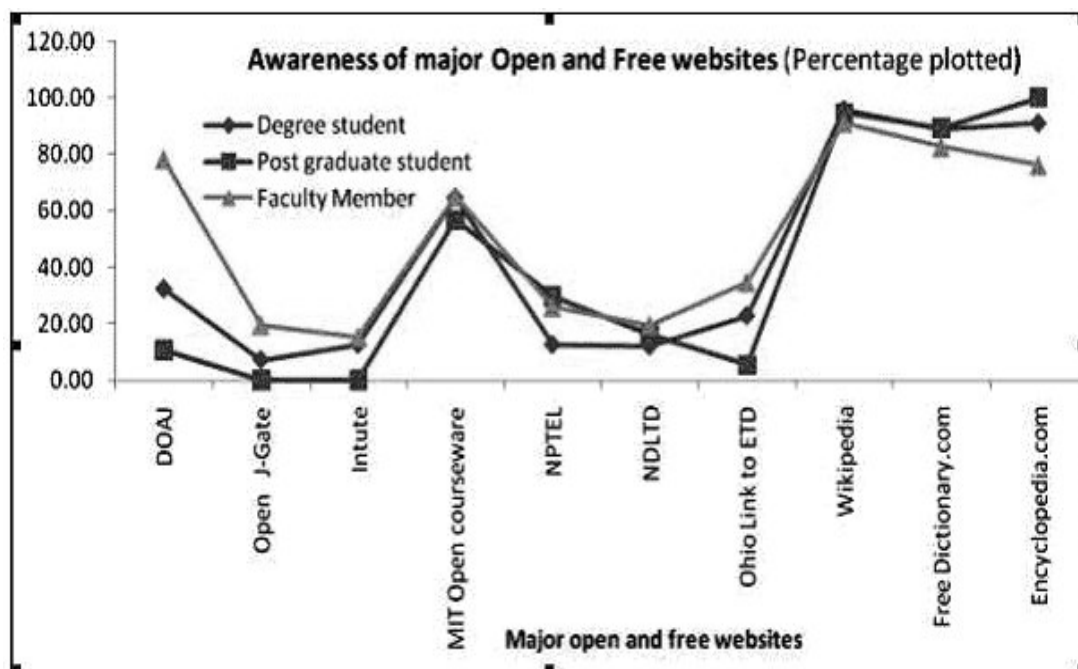
Figure 3: Awareness of major Open and Free Websites

The figure shows the comparative awareness of certain major free and Open Access websites. The majority of the respondents are aware of the websites like Wikipedia, Free dictionary.com, Encyclopedia.com. MIT Open Courseware is another website which majority of the respondents were aware. The faculty was more familiar with the DOAJ platform. Almost 80% of the faculty is aware of the Directory of Open Access Journals. But it is notable that the awareness about majority of the websites is below 40%, which indicates that the academic community is still oblivious of a majority of such Open and free resources. The use of these websites also was to be investigated. A question to this effect was asked. The responses were analyzed and are provided in the form of Figure No 4.

The use pattern is almost similar to the plotting of awareness data. However it can be seen that faculty members are using the MIT Open Courseware more than the other groups of respondents. But their use of popular free sources such as Wikipedia is less compared to other groups of respondents. It is also noteworthy that the faculty uses the DOAJ platform a lot more than the others. However the overall picture is that the use of the majority of websites is below 20% and only in a few cases the use is above 40%. This shows that there is a dire need for making people aware of the availability of these information sources. The respondents were asked about the major obstacles in the use of these websites. The empirical data is provided in the form of Table No 4.

Table No 4   Obstacles for use of open resources (Status wise)

Status	Obstacles for use of open resources (Status wise)			
	Lack of awareness	Lack of training	Lack of internet access	Lack of familiarity
Degree student	111	127	54	9
Post graduate student	27	29	4	0
Faculty Member	34	25	16	2
Total	172	181	74	11

An analysis of the data shows that the major obstacle in the use of these open and free resources is the lack of training as well as lack of awareness. It shows very clearly that we need to have a clear mechanism for the management of these resources in the library systems. Activities such as selection of useful websites, their promotion amongst users, maintenance or rejection need to be done with great care.

We can a draw an analogy with the various library practices in the management of free and open information sources on the Internet. This is shown in Figure No 5. The selection of useful free and open websites from the universe of web pages is equivalent to selection of documents. Its embedding in the library page by linking with a url is equivalent to acquisition in the library. The users are to be made aware of this and be trained on their usage. This process is akin to the traditional marketing practices in a library. The quality and requirement of a service in the library is determined through user surveys.
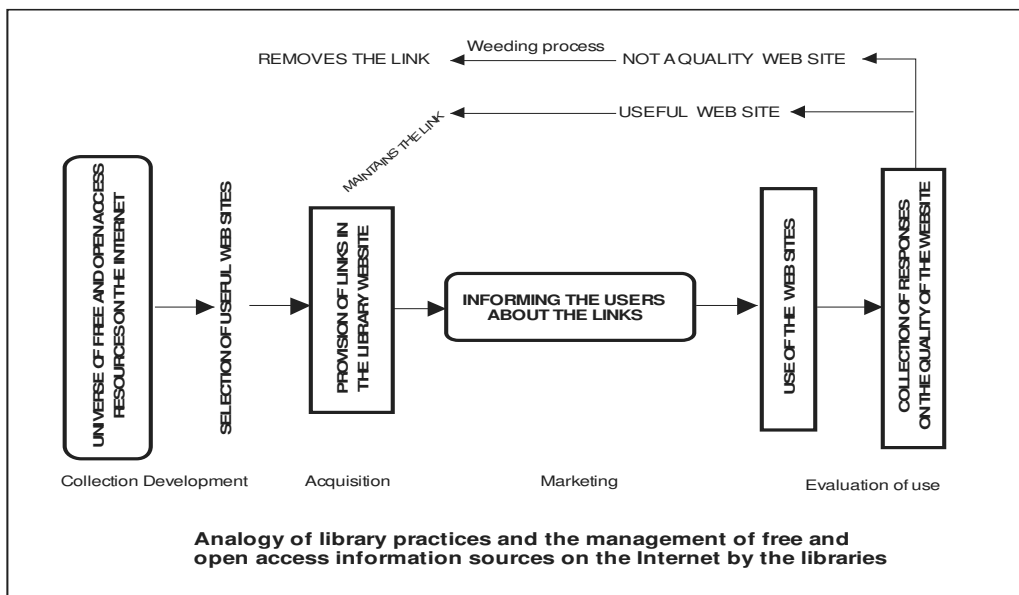

Figure 4: Analogy of Library practice to the Management of Free Online Resources

Similarly user surveys are to be conducted to ascertain whether a particular site is useful and provides quality and authoritative information. If it is useful and if majority of the users favour its retention, then it can be maintained in the library website. Otherwise we can opt for the traditional weeding process by removing the url from the website of the library.

7. Conclusion

The survey reveals that Librarians need to consider seriously the Open and Free resources available online. Though the users of libraries are eager to know about such resources, their source of such information is largely casual, with hardly any methodical attempt to seek information. The librarians, therefore, can play a critical role in spreading awareness of these resources through a well defined and creative approach. Most users tend to resort to Google searches to seek information and perhaps believe that Google leads them to the information that they seek. Such users need to be attracted to the library portal of Open and Free Web resources by providing links to the numerous Open and free websites. The library website can thus become the gateway to the Internet.

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