Online Information Search Techniques in the Electronic Environment by the Students of College of Agriculture, Vijayapur, Karnataka: A Study

Dr. G. Kiran Kumar

Assistant Librarian, College of Agriculture, Vijayapur, (UAS, Dharwad), Karnataka

Email : kiranmyslib@gmail.com

ABSTRACT

The study mainly focused on online information search techniques in the electronic environment by the students of College of Agriculture, Vijayapur, Karnataka. It highlights the use of various types of web based information resources used by the students, frequency of use of web information resources, purpose of use, problems faced while accessing web information resources, preferred search options for searching, use of field based search methods and use of advanced search facilities to access web resources. For this purpose the researchers prepared a well structured questionnaire as a tool for data collection and the collected questionnaire has been analyzed and presented in the form of suitable tables. The article concluded with appropriate suggestions.

KEYWORDS: Search Pattern, Web Resources, Web Environment, Search Methods, Online Information.

INTRODUCTION

The advent of the Internet and the Web has had a profound impact on information searching behavior. The Web has transformed the way the user's access, retrieve and use information. The volume and variety of information has drastically increased. The profusion of information available on the Web poses a challenge to the users who seek relevant information. The users find it difficult to identify, select and access the relevant and appropriate resource. The transformation of resources from print to electronic medium has also made the users to use new tools to access information. Information search techniques is the method preferred by the user to satisfy their information needs. It is important on the part of the academician to have a clear understanding of the various search patterns like Boolean search, phrase search, proximity search etc., for effective retrieve needed information. The present study was conducted to assess the online information search techniques adopted by the students of College of Agriculture, Vijayapur, Karnataka in the electronic environment.

OBJECTIVES OF THE STUDY

The objectives behind conducting the present study are:

1. To identify the frequency of use and purpose of use of electronic resources.
2. To know the various types of online resources accessed by the students.
3. To investigate various problems faced while accessing web information resources.
4. To investigate different search techniques used by students to retrieve relevant information available on Web.
5. To examine the awareness of advance search methods among students.

SCOPE, LIMITATIONS AND METHODOLOGY

The scope of the study is restricted to online information search techniques in the electronic environment by the students of College of Agriculture, Vijayapur, Karnataka. The survey method was adopted, using questionnaire as a tool for data collection. A structured questionnaire was designed and distributed among the students of College of Agriculture, Vijayapur. Out of 269 questionnaires distributed among undergraduate and postgraduate students, Of which 242 filled in questionnaires were received back amounting 89.96%.

DATA ANALYSIS

The data was collected were analyzed and interpreted and the same is presented in the following tables.

1. Category and Gender Wise Distribution

The category and gender wise distribution of respondents has been shown in Table-1. The Table-1 shows that out of 242 respondents, 184 (76.03%) are Undergraduate students and the remaining 58 (23.96%) are Postgraduate students.

Table - 1: Category and Gender Wise Distribution

Category	Gender		Total
	Male (N=144)	Female (N=74)	(N=242)
Undergraduate	136 (94.44)	48 (64.86)	184 (76.03)
Postgraduate	32 (22.22)	26 (35.13)	58 (23.96)

Among 144 male respondents, 136 (94.44%) are Undergraduate students and 32 (22.22%) are Postgraduate students. In case of 74 female respondents, 48 (64.86%) are Undergraduate students and 26 (35.13%) are Postgraduate students.

2. Use of Various Types of Web Based Information Resources

The use of various types of web based information resources by the respondents has been summarized in Table-2. The Table-2 depicts that 217 (89.66%) of respondents use e-teaching materials, followed by 140 (57.85%) e-tutorials, 135 (55.78%) e-books, 116 (47.93%) e- reference resources, 99 (40.90%) e-magazines, 83 (34.29%) e-journals, 63 (26.03%) e-reports, 61 (25.20%) e- databases, 59 (24.38%) e- thesis and dissertations, 36 (14.87%) e-conference proceedings and 32 (13.22%) of respondents use e-standards/ specifications. The Table-2 also depicts that 163 (88.58%) of respondents of undergraduate students and 54 (93.10%) of respondents of postgraduate students use e-teaching materials.

Table - 2: Use of Various Types Web Based Information Resources

Information Resources	Undergraduate (N=184)	Postgraduate (N=58)	Total (N=242)
E-Teaching Materials	163 (88.58)	54 (93.10)	217 (89.66)
E-Journals	41 (22.28)	42 (72.41)	83 (34.29)
E-Books	96 (52.17)	39 (67.24)	135 (55.78)
E-Magazines	71 (38.58)	28 (48.27)	99 (40.90)
E-Conference Proceedings	19 (10.32)	17 (29.31)	36 (14.87)
E-Report	36 (19.56)	27 (46.55)	63 (26.03)
E-Tutorials	109 (59.23)	31 (53.44)	140 (57.85)
E-Standards/Specifications	13 (07.06)	19 (32.75)	32 (13.22)
E- Databases	25 (13.58)	36 (62.06)	61 (25.20)
E- Thesis and Dissertations	09 (04.89)	50 (86.20)	59 (24.38)
E- Reference resources (Dictionaries, encyclopedias etc.)	83 (45.10)	33 (56.89)	116 (47.93)
Note: Figures in parentheses indicate percentage and because of multiple choice options the percentage is exceeded to more than 100%.			

3. Frequency of Use of Web Information Resources

The Frequency of use of web information resources by the respondents has been summarized in Table-3. The Table-3 depicts 145 (59.91%) of respondents use web information resources 'Daily', followed by 64 (26.44%) use '2-3 Times in a Week', 21 (08.67%) use 'Fortnightly' and 12 (04.95%) of respondents use web information resources 'Monthly'. The Table-3 also depicts that 104 (56.52%) of undergraduate students and 41 (70.68%) of postgraduate students use web information resources 'Daily'.

Table - 3: Frequency of Use of Web Information Resources

Use of Web Information Resources	Undergraduate (N=184)	Postgraduate (N=58)	Total (N=242)
Daily	104 (56.52)	41 (70.68)	145 (59.91)
2-3 times in a Week	51 (27.71)	13 (22.41)	64 (26.44)
Fortnightly	17 (09.23)	04 (06.89)	21 (08.67)
Monthly	12 (06.52)	00 (00.00)	12 (04.95)
Note: Figures in parentheses indicate percentage			

4. Purpose of Use of Web Information Resources

The purpose of use of web information resources by the respondents has been summarized in Table-4. The Table-4 depicts 200 (82.64%) of respondents use web information resources for the purpose of accessing the audio/ visual materials, followed by 182 (75.20%) use for reading/ writing assignment and projects, 176 (72.72%) for collecting general information, 93 (38.42%) reading/ writing articles / papers, 81(33.47%) for basic scientific and technical information and 70 (28.92%) of respondents use web information resources for the purpose of preparation for seminars, conference and workshop. The Table-4 also depicts that 153 (83.15%) of undergraduate students use web information resources for the purpose of accessing the audio/ visual material and 51 (87.93%) of postgraduate students use web information resources for the purpose of reading/ writing articles / papers.

Table - 4: Purpose of Use of Web Information Resources

Purpose	Undergraduate (N=184)	Postgraduate (N=58)	Total (N=242)
Reading/ Writing articles / papers	42 (22.82)	51 (87.93)	93 (38.42)
Reading/ Writing Assignment and projects	136 (73.91)	46 (79.31)	182 (75.20)
Preparation for Seminars, conference and workshop	31 (16.84)	39 (67.24)	70 (28.92)
For basic scientific and technical information	56 (30.43)	25 (43.10)	81 (33.47)
For collecting general information	124 (67.39)	52 (89.65)	176 (72.72)
To access audio/ visual materials	153 (83.15)	47 (81.03)	200 (82.64)
Note: Figures in parentheses indicate percentage and because of multiple choice options the percentage is exceeded to more than 100%.			

5. Problems Faced while Accessing Web Information Resources

The problem faced by the respondents while accessing web information resources has been summarized in Table-5. The Table-5 depicts that 114 (47.10%) of respondents face problem while accessing web information resources due to change of the content/ information, followed by 133 (54.95%) face problem due to retrieval of irrelevant/ junk information, 104 (42.97%) poor internet connectivity, 89 (36.77%) change in URL, 83 (34.29%) lack of knowledge in information technology for effectively utilize the e-resources/services, 66 (27.27%) frequent power failure, 65 (26.85%) unorganized information content, 58 (23.96%) server down or system problem and 07 (02.89%) of respondents face problem while accessing web information resources due to lack of assistance from library staff. The Table-5 also depicts that 93 (50.54%) of undergraduate students face problem while accessing web information resources due to change of the content/ information and 44 (75.86%) of postgraduate students face problem while accessing web information resources due to retrieval of irrelevant/ junk information.

Table - 5: Problems Faced while Accessing Web Information Resources

Problems	Undergraduate (N=184)	Postgraduate (N=58)	Total (N=242)
Change in URL	71 (38.58)	18 (31.03)	89 (36.77)
Change of the content/ information	93 (50.54)	21 (36.20)	114 (47.10)
Unorganized information content	52 (28.26)	13 (22.41)	65 (26.85)
Lack of assistance from library staff	05 (02.71)	02 (03.44)	07 (02.89)
Lack of IT knowledge to effectively the e-resources/services	68 (36.95)	15 (25.86)	83 (34.29)
Poor internet connectivity	65 (35.32)	39 (67.24)	104 (42.97)
Retrieval of irrelevant/ junk information	89 (48.36)	44 (75.86)	133 (54.95)
Frequent power failure	43 (23.36)	23 (39.65)	66 (27.27)
Server down or system problem	42 (22.82)	16 (27.58)	58 (23.96)
Note: Figures in parentheses indicate percentage and because of multiple choice options the percentage is exceeded to more than 100%.			

6. Preferred Search Options for Searching Web Based Information Resources

The preferred search options for searching web based information resources used by the respondents has been summarized in Table-6. The Table-6 depicts that 178 (73.55%) of respondents prefer simple search option for searching web based information resources, followed by 42 (17.35%) of respondents prefer both simple and advance search options for searching web based information resources and 22 (09.09%) of respondents prefer advance search options for searching web based information resources. The Table-6 also depicts that 156 (84.78%) of undergraduate students prefer simple search option for searching web based information resources and 24 (41.37%) of postgraduate students prefer both simple and advance search options for searching web based information resources.

Table - 6: Preferred Search Options for Searching Web Based Information Resources

Search Method	Undergraduate (N=184)	Postgraduate (N=58)	Total (N=242)
Simple	156 (84.78)	22 (37.93)	178 (73.55)
Advanced	10 (05.43)	12 (20.68)	22 (09.09)
Both	18 (09.78)	24 (41.37)	42 (17.35)
Note: Figures in parentheses indicate percentage			

7. Use of Field Based Search Methods to Access Web Resources

The use of field based search methods to access web resources by the respondents has been summarized in Table-7. The Table-7 depicts that 223 (92.14%) of respondent use 'Author' field based search to access web resources, 206 (85.12%) use 'Title' field, 203 (83.88%) use 'Keyword' field, 106 (43.80%) use 'Subject' field and 31 (12.80%) of respondent use 'Publisher' field based search to access web resources. The Table-7 also depicts that 171 (92.93%) of undergraduate students use 'Author' field based search to access web resources and 56 (96.55%) of undergraduate students use 'Keyword' field based search to access web resources.

Table - 7: Use of Field Based Search Methods to Access Web Resources

Field Based Search	Undergraduate (N=184)	Postgraduate (N=58)	Total (N=242)
Author	171 (92.93)	52 (89.65)	223 (92.14)
Title	165 (89.67)	41 (70.68)	206 (85.12)
Subject	86 (46.73)	20 (34.48)	106 (43.80)
Publisher	22 (11.95)	09 (15.51)	31 (12.80)
Keyword	147 (79.89)	56 (96.55)	203 (83.88)
Note: Figures in parentheses indicate percentage and because of multiple choice options the percentage is exceeded to more than 100%.			

8. Use of Advanced Search Facilities to Access Web Resources

The advance search options used by the respondents for searching web information resources has been summarized in Table-8. The Table-8 depicts that 160 (66.11%) of respondents use Field Based Search for searching web information resources, 141 (58.26%) use Phrases Search, 81 (33.47%) use Boolean Search and 55 (22.72%) of respondent Truncation/ Wildcard Search for searching web information resources. The Table-8 also depicts that 112 (60.86%) of undergraduate students and 48 (82.75%) of postgraduate students use Field Based Search to access web resources.

Table - 8: Use of Advanced Search Facilities to Access Web Resources

Advance Search Facilities	Undergraduate (N=184)	Postgraduate (N=58)	Total (N=242)
Boolean Search	38 (20.65)	43 (74.13)	81 (33.47)
Truncation/ Wildcard Search	36 (19.56)	19 (32.75)	55 (22.72)
Field Based Search	112 (60.86)	48 (82.75)	160 (66.11)
Phrases Search	109 (59.23)	32 (55.17)	141 (58.26)
Note: Figures in parentheses indicate percentage and because of multiple choice options the percentage is exceeded to more than 100%.			

SUGGESTIONS

The following suggestions are made for further improvement in utilization of web based information resources.

- The speed of the internet should be increased to save user valuable time and to speed up information search and retrieval process.
- The students should be trained in using advance search options available in search menu of web based information resources for retrieval of relevant information.
- The students should further improve their information searching skills to make better use of largely available web information resources.
- The publishers and colleges should organize seminars, workshops and orientation programmes for students at regular interval of time to keep them in tune with latest technologies.
- All the web information resources should be linked to library webpage with information search tips for users.

CONCLUSION

The tremendous development in the area of Internet and Information Technology, large amount of educational resources are being generated, distributed and accessed in the electronic format. The dependency on internet based services is increasing day to day and users of traditional users are depending much more on information resources available through internet to meet there academic needs. The web based information resources in the digital world represent a large investment of people's effort, money and wisdom. The users should become familiar with latest search and retrieval techniques for better utilization of available web based information resources. The users should be trained with various search techniques for retrieval of relevant information from the web.

REFERENCES

[1] Kiran Kumar, G and Kumbar, Mallinath (2012). E- Information Search Pattern By The Faculty Of Autonomous Engineering Institutions In Karnataka: A Survey. Library *Progress (International).* 32(1), 123-132.

[2] Sharma, C. (2009). Use and impact of e-resources at Guru Gobind Singh Indraprastha University India: a case study. *Electronic Journal of Academic and Special Librarianship*, 101. Retrieved from http://southernlibrarianship.icaap.org/ content/v10n01/sharma_ 01.html

[3] Kiran Kumar, G and Kumbar, Mallinath (2015). Use of Electronic Information Resources and Search Pattern by the Faculty of Autonomous Engineering Colleges in Karnataka: A Survey. *SRELS journal of Information Management,* 52(4), 259-266.

[4] Thanuskodi, S. (2011). Usage of Electronic Resources at Dr T.P.M. Library, Madurai Kamaraj University: A Case Study. *DESIDOC Journal of Library and Information Technology,* 31(6), 437–45.