A Study on use of ICT based Resources and Services by the Faculty Members, Research scholars, and PG Students of Arts and Science colleges in Union Territory of Puducherry

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Abstract

This paper presents the findings of a study which has designed to investigate the different aspects of ICT based resources use behavior of college students, Research scholar and Teachers. This study shows the purpose of use, Awareness approach, Experience of use and usefulness of use ICT based resources. In this study the data has been collected through questionnaire and observational methods. Total 1500 questionnaires were administered but only 1332 filled questionnaires were obtained from the respondents.

Keywords

information and communication technology, Resources and Services, Faulty Members.
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Electronic access

The journal is available at www.jalis.in

Journal of Advances in Library and Information Science
ISSN: 2277-2219 Vol. 2. No.1. 2013. pp. 1-6

Introduction

Information and communication technology (ICT) has become an integral part of modern information oriented society and has turned the world into a 'global village'. It is collaborating and leading all the professions. Libraries are also enjoying technological application to information storage and retrieval, have largely been affected by the rapid changes in Information and Communication Technology. Application of ICT has become the top most necessity of college libraries to ensure optimum utilization of resources for storing, organizing, retrieving and dissemination of information to any and every reader, from any and every corner of the world, round the clock. Appropriate use of ICT in college libraries with clear understanding of its potential is necessary for getting the maximum benefit in terms of qualitative services. It is very effective in accessing and utilization of vast mass of information. In fact the impact of Information and Communication Technology is visible in every activity of college library.

Review of Literature

Majid and Tan (2002) investigated Information needs and information-seeking behavior of 102 computer engineering undergraduate students at Nanyang Technological University (NTU), Singapore.The study showed that the topmost five preferred information sources are books, lectures, the Internet, friends and manuals. Unexpectedly, the use of databases and electronic sources were quite low among computer engineering students. The study recommended promotional campaign for introducing electronic information resources to library users. Callinan (2005) conducted a study on Information-seeking behaviour of undergraduate biology students in University College Dublin. The findings showed that, apart from web sites and web-based lecture notes, lack of awareness is the primary reason why undergraduate biology students did not use the library's electronic databases. Asemi and Riyahiniya (2007) conducted a survey to investigate the awareness and use of digital resources by 250 students in the libraries of Isfahan University of Medical Sciences, Iran. The results were that 70 percent of students were aware of digital resources, but only 69 percent of them have used them; 62 percent were aware of offline databases, whereas only about 19 percent used them through the Central Library LAN network. In total 87 percent of students felt that the available data resources met their information needs. Users are faced with problems like low speed connectivity and shortage of hardware facilities.

An exploratory study by Vezzosi (2009) at the University of Parma (Italy) on information behaviour of doctoral students showed that, doctoral students rely heavily on the internet for their research work. Students demonstrated progress throughout the years of their doctorate course in terms of awareness and information competence. Govinda raju (2010) found by his survey that the use of electronic resources is found to be significant among the users of the Andhra University. This is quite natural and expected in the present day implementation environment. Some of the resources such as e-book, e-encyclopedias, e-dictionaries are less used. He also felt that to further maximize use of the e-resources, wide publicity and imparting trainings were found to be necessary.

Kattimani and Kamble (2010) made a study on awareness of Internet and online information resources. His study is confined only to the Honey well library, Bangalore. Data collected from the administrative staff, supportive staff and software engineers. The response rate is 80%. The study revealed that about 80.2% of the library users have quality awareness on Internet information resources. Dhanavandan (2012) discussed the network security aspects among engineering professionals in Tamil Nadu. Nearly 200 questionnaires were distributed among the library professionals of the engineering Colleges libraries in Tamil Nadu. Nearly 140 responses were received The networking of libraries has dramatically changed the old
concept of libraries in new information storage and retrieval mechanism has now become very faster and easier. The application of computer and networking technologies has improved the efficiency of library services.

Objectives:

The main objectives of the present study are as follows:

1. To study the awareness approach to ICT based resources and services by Teachers, research scholars and PG students of Arts and Science colleges.
2. To know the place from where to access the ICT based resources and services by Teachers research scholars and PG students of Arts and Science colleges in Puducherry.
3. To find out the experience in use ICT based resources and services by Teachers, research scholars and PG students of Arts and Science colleges.
4. To know the purpose of use of ICT based resources and services by Teachers, research scholars and PG students of Arts and Science colleges.
5. To find out the reason for influencing ICT based resources and services among Teachers, Research scholars and PG students of Arts and Science colleges.
6. To know the useful ness of ICT based resources and services among Teachers, Research scholars and PG students of Arts and Science colleges and
7. To find out the opinion on the necessity of training to use of ICT based resources and services by Teachers, Research scholars and PG students of Arts and Science colleges

Methodology

A schedule of questionnaire was developed on the basis of the objective of the study and questions to be addressed. But, whenever necessary, observation and interview methods was also used. The data for study was collected from faculty members, research scholars and PG students of Arts and science colleges in Puducherry. A total of 1500 questionnaires were distributed among faculty members, research scholars and PG students of Arts and science colleges. Out of 1500 questionnaires distributed, 1332 valid questionnaires were collected and then data was analyzed, tabulated, interpreted and presented in form of this paper. The relevant data collected on the basis of survey (questionnaire, interview and observation) was analyzed and inference was drawn to get the results under different objectives

ANALYSIS AND INTERPRETATION

An attempt was made to identify the awareness approach of users to ICT based resources providing options viz. Membership, library web sites, information brochure of library, colleagues, staff and other sources and User Orientation. It is clear from table 1 that 100 teachers (27.17%) 29 research scholars (16.20%), and 268 PG students (34.14%) were aware of ICT based resources through their colleagues whereas 68 (18.48%) 22 (12.29%) research scholars , and 38 (4.84%) PG were made aware through the library websites; and 98 (26.63%) teachers, 64 (35.75%) research scholars, and 137 (17.45%) PG students were made aware through the library staff and other sources. The remaining sources

namely information brochure of the library, user orientation, and membership were not familiar among the respondents of arts and science colleges in making them aware of ICT based resources.

It is therefore obvious that colleagues (teachers and PG students) and class fellows in the case of PG students was the prime source for making the users themselves aware of ICT based resources. The other important sources were library staff and other sources. It is surprising that user orientation as a source did not play much role in promoting or increasing the use of ICT based resources. It is evident from the result that only 148(11.11%) respondents out of 1332 were able to know through user orientation.

Place of access to ICT based resources

Table 2 presents the result of place from where the users of Arts and Science colleges had access to ICT based resources. There were four options viz. personal Desk Top, Library computer centre, Campus LAN, and Any Other (cyber café). The result reveals that 142 (38.59%) teachers accessed ICT based resources through library computer center; 34.78 percent of them accessed through commercially available internet café; 23.91percent of them had access through their personal desk tops; and 2.72 percent of them could access through campus LAN. In the case of research scholars, 56.98 percent of them accessed through library computer center; 22.91percent of them accessed through commercially available internet café; 17.88 percent of them had access through their personal desk tops; and 2.23 percent of them could access through campus LAN. Out of 785 PG Students, 430(54.78%) PG students accessed through library computer centre; 323(41.15%) PG students accessed through commercially available internet café; 25(3.18%) had access through their personal desk tops and 7(0.89%) PG students could access through campus LAN.

On the whole, it was observed that 674 (50.60%) respondents accessed through Library computer centre whereas 492(36.94%) respondents had access through commercial internet café; 145 (10.89%) respondents had access to ICT based resources through their personal computers; and 21(1.58%) respondents had access through the campus LAN. Thus, it is very clear that the library computer centre plays a prime role for users in providing ICT based resources. It was also found that most of the users irrespective of the category (i.e. teachers, research scholars, and PG students) relied on library computer centre.

Table 1Status wise Distribution of Respondent's Awareness approach to ICT based resources

S. No	Awareness Approach Through	No. Of .Respondents						Total	%
		Teacher	%	Research scholars	%	PG Students	%		
1	Membership	42	11.41	20	11.17	112	14.27	174	13.06
2	Library website	68	18.48	22	12.29	38	4.84	128	9.61
3	Information brochure	52	14.13	32	17.88	102	12.99	186	13.96
4	Colleagues/Class fellows	10	27.17	29	16.20	268	34.14	397	29.80
5	Library Staff and other Sources	98	26.63	64	35.75	137	17.45	299	22.45
6	User Orientation	8	2.17	12	6.70	128	16.31	148	11.11
Total		368	100.00	179	100.00	785	100.00	1332	100.00

Table 2 Status wise Distribution of Respondents Place of access to ICT based Resources

Place of Access	No. of Respondents						Total	%
	Teacher	%	Research	%	PG Students	%		
Personal Desk Top	88	23.91	32	17.88	25	3.18	145	10.89
Library	142	38.59	102	56.98	430	54.78	674	50.60
Campus LAN	10	2.72	4	2.23	7	0.89	21	1.58
Any other(cyber cafe)	128	34.78	41	22.91	323	41.15	492	36.94
Total	368	100.00	179	100.00	785	100.00	1332	100.00

Table 3 Status wise distribution of Respondents Experience in using ICT based resources

Status	Less than One year	One year	Two Years	Three Years	More than Three years	Total
Teachers	13 (3.53)	71 (19.29)	122 (33.15)	67 (18.21)	95 (25.82)	368
Research Scholars	20 (11.17)	44 (24.58)	71 (39.66)	30 (16.76)	14 (7.82)	179
PG Students	137 (17.45)	198 (25.22)	283 (36.05)	89 (11.34)	78 (9.94)	785
Total	170 (12.76)	313 (23.50)	476 (35.74)	186 (13.96)	187 (14.04)	1332

Data presented in table 3 indicates the academic status-wise distribution of respondents' experience in using ICT based resources and services. It could be noted that out of total 1332 respondents, 170(12.76%) respondents have been accessing ICT based resources and services for less than one year; 313(23.50%) respondents have been accessing ICT based resources and services for One year; 476(35.74%) respondents have been accessing ICT based resources and services for two years; 186(13.96%) respondents have been accessing ICT based resources and services for three years and 187(14.04%) respondents have been accessing ICT based resources and services for more than three years.

With regard to 785 PG students, 36.05 percent of respondents have been accessing ICT based resources and services for two years and 9.94 percent of respondents have been accessing ICT based resources and services for more than three years. Among 179 Research Scholars, 39.66 percent of respondents have been accessing ICT based resources and services for two years and 9.94 percent of respondents have been accessing ICT based resources and services for more than three years. From the total number of 368 Teachers, 33.15 percent of respondents have been accessing ICT based resources and services for two years and 3.53 percent of respondents have been accessing ICT based resources and services for less than one year.

Table. 4 Status wise Distribution of Respondent's purpose of using ICT based resources

Status	Research	Study	Accessing Online Data bases	Publis hing	Down loading e-resources	Professional development	Placem ents	Enterta inment	Chatting	Others	Total
Teachers	167 (45.38)	32 (8.70)	28 (7.61)	48 (13.04)	31 (8.42)	23 (6.25)	8 (2.17)	16 (4.35)	3 (0.82)	12 (3.26)	368
Research Scholars	71 (39.66)	16 (8.94)	10 (5.59)	18 (10.06)	30 (16.76)	3 (1.68)	11 (6.15)	9 (5.03)	8 (4.47)	3 (1.68)	179
PG Students	0 (0.00)	397 (50.57)	31 (3.95)	2 (0.25)	59 (7.52)	0 (0.00)	48 (6.11)	142 (18.09)	95 (12.10)	11 (1.40)	785
Total	238 (17.87)	445 (33.41)	69 (5.18)	68 (5.11)	12 (9.01)	26 (1.95)	67 (5.03)	167 (12.54)	106 (7.96)	26 (1.95)	1332

Table 4 indicates the academic status wise distribution of respondents' purpose of using ICT based resources and services. It is clearly observed from the table that, 445 (33.41%) respondents have used ICT based Resources and services for their study purpose; 238 (17.87%) respondents have used ICT based resources and services for their research purpose; 69 (5.18%) respondents have used ICT based resources and services for accessing online databases, 120 (9.01%) respondents have used ICT based resources and services for their downloading e-resource, 68(5.11%) respondents have used ICT based resources and services for their publishing articles and books; 26(1.95%) respondents have used for their professional Development; 67(5.03%) respondents have used ICT based resources and services for their placements; 167(12.57%) respondents have used for entertainment; 106(7.96%) respondents have used ICT based resources for

chatting purpose and 26(1.95%) respondents have used ICT based resources other purpose.

Among 785 PG students, 33.68 percent of the respondents have used ICT based resources and services for their study purpose and 0.25 percent of the respondents have used for publishing articles and books. With regard to 179 Research scholars 39.66 percent of the percent of the respondents have used ICT based resources and services for their research purpose and 1.68 percent of the respondents have used for other purposes. Out of 368 Teachers 45.38 percent of the respondents have used ICT based resources and services for their research purpose and 0.82 percent of the respondents have used for chatting purpose.

Table 5 Status wise Distribution of Respondents Reasons for Influencing ICT based resources

S. No	Reasons	Teachers =368		Research Scholars=179		PG Students=785		Total =1332	
		Yes	No	Yes	No	Yes	No	Yes	No
1	Fast access and delivery of information	320 (86.96)	48 (13.04)	124 (69.27)	55 (30.73)	698 (88.92)	87 (11.08)	1142 (85.74)	190 (24.20)
2	Provisions of accurate and current information	305 (82.88)	63 (17.12)	112 (62.57)	67 (37.43)	629 (80.13)	156 (19.87)	1046 (78.53)	286 (21.47)
3	Exploring wide area of information sources nearer to the interested topic	202 (54.89)	166 (45.11)	98 (54.75)	81 (45.25)	428 (54.52)	357 (45.48)	728 (54.65)	604 (45.35)
4	To share research information with distant colleagues	179 (48.64)	189 (51.36)	62 (34.64)	117 (65.36)	259 (32.99)	526 (67.01)	500 (37.54)	832 (62.46)
5	Saves time my own communication (by using e-mail) and search for information	197 (53.53)	171 (46.47)	87 (48.60)	92 (51.40)	291 (37.07)	494 (62.93)	575 (43.17)	757 (56.83)

Reasons for influencing ICT based resources

The e-information available on the Internet has been a great asset for many of the respondents. Their have been able to keep themselves abreast of latest information and improve their professional compentence. , which influenced them to use ICT based resources. Opinions of the Teachers, Research Scholars and PG students presented in Table 5. It is evident from Table 5 that, for majority of respondent's fast access and delivery of information (85.74%), the provision of accurate and current information (78.53%) and exploring wide area of information sources nearer to the interested topic (54.65%) are the reasons for accessing ICT based resources

Table 6 shows the academic status wise distribution of respondent's usefulness of ICT based resources and services. It is clear that out of 1332 respondents, 302(22.67%) respondents felt that it is very useful; 901(67.64%) respondents felt that it is useful; 118(8.86%) respondents felt that it is average and 11(0.83%) respondent were felt that not useful.

With regard to 785 PG students, 73.50 percent of them felt that it is useful and 1.02 percent of them felt that it is not useful. Out of 179 Research scholars, 52.51 percent of them felt that it is useful and 0.56 percent of them felt that it is not useful.

Table 6 Status Wise Distribution of Respondents Regarding the usefulness of ICT based resources

Status	Very Useful	Useful	Average	Not Useful	Total
Faculty Members	112 (30.43)	230 (62.50)	24 (6.52)	2 (0.54)	368
Research Scholars	52 (29.05)	94 (52.51)	32 (17.88)	1 (0.56)	179
PG Students	138 (17.58)	577 (73.50)	62 (7.90)	8 (1.02)	785

Total	302 (22.67)	901 (67.64)	118 (8.86)	11 (0.83)	1332

Table 7 Status wise Distribution of Respondents opinion on the necessity of Training to use of ICT based resources

S.No	Status	Strongly Disagree	%	Dis agree	%	Neutral	%	Agree	%	Strongly agree	%	Total
1	Teacher	3	0.82	7	1.90	30	8.15	226	61.41	102	27.72	368
2	Research Scholars	7	3.91	11	6.15	25	13.97	82	45.81	54	30.17	179
3	PG Students	12	1.53	22	2.80	62	7.90	395	50.32	294	37.45	785
Total		22	1.65	40	3.00	117	8.78	703	52.78	450	33.78	1332

An attempt was made to analyze the need for training to make the resources effectively used. The result of the analysis as shown in Table 7 reveals that 703 (52.78%) respondents agreed, and 450 (33.78%) users strongly agreed to enhance the training for users to promote the utilization of ICT based resources. On the other hand, less than 5.00 percent of users disagreed to have training for utilizing ICT based resources.

Conclusion

It is clearly found from this study that the colleagues/ classmates was the prime source for making the users themselves aware of ICT based resources. Majority of the respondents access ICT based resources through library computer centre. It is found from this study that 35.74 percent of respondents have been accessing ICT based resources and services for two years. It is clear from the table 6 that 67.64 percent respondents felt that it is useful.

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