

Undergraduates' Information Literacy Skills and the Use of Electronic Resources in Delta State University, Abraka, Nigeria

Toyo, Oghenevwogaga David

Department of Library & Information Science,
Delta State University,
Abraka, Delta State,
Nigeria.

Email: davidoghenevwogaga@gmail.com

Abstract

This study examined undergraduates' information literacy skills and the use of electronic resources in Delta State University, Abraka, Nigeria. The study adopted the survey method. A questionnaire was used for data collection. The sample size for the study is 121 undergraduate Library and Information Science students. The data collected were critically analyzed using frequency and percentage tool. The study revealed that undergraduate LIS students in Delta State University, Abraka make use of various electronic resources. The study further revealed that the respondents are well versed with information literacy skills which they use to exploit the millions of information available in electronic resources via the internet. It was also discovered that undergraduate students derive various benefits from the use of electronic resources and they include instructional delivery to support teaching and research activities, relatively easy to use, access to a wider range of information, aids access and retrieval of information, improvement in general communication, improved overall academic performance and high dependency value on research work. Also, it was discovered by the study that there are various obstacles faced by undergraduate LIS students on the use of electronic resources which include ineffective communication channels, slow internet access, lack of awareness of electronic information resources, erratic power supply and excessive academic workload amongst others. It was recommended that proper and effective communication channels for retrieving electronic information resources be made available to students of tertiary institutions, well equipped information centres should be made accessible to students of tertiary institutions irrespective of the faculty or department, awareness campaigns should be organized from time to time on the use and usefulness of electronic information resources to undergraduate students and so on.

Keywords:- Information Literacy Skills, Use, Electronic Resources, Undergraduates, LIS, Tertiary Institutions, Delta State University, Nigeria.

INTRODUCTION

Information literacy is an essential component of a successful academic career (Oakleaf & Owen, 2010). Students who lack these skills experience delays and frustration when attempting to complete course-related work which requires research. The ability to locate information is necessary for quality research.

According to the American Library Association (1989), to be information literate, a person must be able to recognize when information is needed and have the ability to locate, evaluate, and use the needed information effectively. Studies have indicated the need to improve information literacy skills early, particularly during the first-year, where undergraduate students' computer proficiencies do not correlate with their research

knowledge (Freeman & Lynd-Balta, 2010; Oakleaf & Owen, 2010).

However, it is worthy to note that information literacy is the basis for life-long learning. Julien (2002) observed that it is the ability to make efficient and effective use of information sources, and that an information literate person today should possess specific online searching skills, which include the ability to select appropriate search terminology, construct a logical search strategy, and evaluate information appropriately.

Thanuskodi (2012) opined that electronic resources are the electronic representation of information. They are available in various forms like e-books, digital libraries, online journal magazine, e-learning tutors and on-line test. Because of the effective presentation with multimedia tools, these e-resources have become the source of information.

Furthermore, Thanuskodi agreed that electronic resources deliver the collection of information as full text databases, e-journals, image collections, multimedia in the form of CD, tape, internet, web technology, etc. In addition, electronic information source are a wide range of products going from electronic periodicals to CD-ROMs, from mailing list to databases, all of them having a common feature of being used and sometime modified by a computer (Thanuskodi, 2012).

According to Ajayi, Shorunke and Aboyade (2014), to be literate means having the skills of reading and writing in any language whatsoever. Moreover, information technology literacy can be defined as having the fundamental information about the components forming the information technologies, to have the skills of practicing these components to solve problems in societies facing the information age (Ajayi, Shorunke & Aboyade, 2014).

Commenting on the advantages of electronic resources, Dadzie (2005) noted that electronic resources are invaluable research tools that complement the print – based resources in a traditional library setting. Their advantages, according to her include: access to information that might be restricted to the user due to geographical location or finances, access to more current information, and provision of extensive links to additional resources of related contents. The rapid growth of new technologies has changed the communication process and reduced the cost of communication for individuals.

Electronic information sources can be seen as the most recent development in information technology and are among the most powerful tools ever invented in human history. Electronic information sources are becoming more and more important for the academic community (Kumar and Kumar, 2008).

Issa, Amusan and Daura (2009) citing September (1993) asserted that undergraduate students need some level of information literacy skills to make decisions about academic matters and other aspects of their daily lives. As the use of e-resources continues to soar, users are expected to develop information literacy skills. These skills, as Julien (2002) observed will enable users to make efficient and effective use of information sources. Julien further identified the skill domains that are involved and classified them as cognitive, affective, and physical, i.e., thought, attitude, and operation.

Also, Omosekejimi, Eghworo and Ogo (2015) citing Uzuegbu (2012) in his study asserted that for effective utilization of electronic databases, not only are computers and internet connection necessary, creating a usable interface is indispensable. Already, Ani, Okon & Ahiauzu agreed that a computer database interface aids access and retrieval of information. Hence, a URL link is an interface that can help students overcome the problems of obtaining passwords, username, inputting error, among other things when making use of online databases.

Although the introduction of these electronic resources and services is a welcome development to the information profession, their use by university students poses some challenges and concerns (Gwazah, 2011). Chisenga (2004) cited in Egberogbe (2011) listed some factors hindering the use of e- resources in Nigeria higher institutions to include lack of

strategic planning, adequate or reliable funding, inability of tertiary institutions to provide free internet services to users amongst others.

Omosokejimi, Eghworo and Ogo (2015) are of the view that despite several advantages of electronic information resources and its positive effect on students' academic performance in universities, many university students are yet to harness the opportunities provided by these initiatives due to inadequate facilities or lack of maintenance culture and even where these facilities are in place, the potential users of these new information sources are not making use of the valuable electronic information resources owing to lack of awareness or lack of skills required to navigate the modern technology.

This study will be beneficial to undergraduate students in tertiary institutions in many ways. First, the outcome of this study will raise the consciousness of students on the relevance of information literacy skills in their learning and research activities. Second, it will be of help to students on knowing the various types of electronic resources and the use of electronic resources for enhancing their academic performance and personal development. It will also serve as a blueprint to university management and staff, researchers and other information seekers who want to determine the present status of information literacy skills among undergraduate students in tertiary institutions in Nigeria. Thus, this study is considered significant as it will contribute to knowledge.

STATEMENT OF THE PROBLEM

It has been observed that upcoming scholars, especially university freshmen and undergraduates often experience difficulty searching and using information effectively. Lack of information literacy skills seen to be at the root of students' search difficulties and poor performance in school. Electronic information resources offer the 21st century students new opportunities that were not available to previous generations, yet large number of students leave universities without necessary skills to cope within the information-based society. Despite the success stories by some students on the use of electronic resources in tertiary institutions in Nigeria, it has been revealed by some researchers that constraints in accessing electronic resources include insufficient number of terminals available for use despite high demand, inadequate electricity supply, lack of information retrieval skills for exploiting electronic resources amongst others. Also, other researchers like Oparah and Faloye (2015) further observed that the effective use of electronic resources in academic institutions are marred by a variety of factors such as difficulty in getting information due to poor retrieval skills, unfamiliarity with the library environment and resources as well as poor information literacy and evaluation skills. Arising from the foregone, the study is therefore set out to investigate the information literacy skills and use of electronic resources by undergraduate Library and Information Science students in Delta State University, Abraka.

RESEARCH QUESTIONS

The following research questions are raised to guide this study:

- (1) What skills do undergraduate Library and Information Science students in Delta State University, Abraka possess for using electronic resources?
- (2) What are the various electronic resources used by the undergraduate LIS students?
- (3) What benefits do undergraduate LIS students derive from the use of electronic resources?
- (4) What are the obstacles faced by undergraduate LIS students on the use of electronic resources?

PURPOSE OF THE STUDY

The purpose of this study is to examine the information literacy skills and use of

electronic resources by undergraduate Library and Information Science students in Delta State University, Abraka. However, the specific objectives of the study are to:

- (1) Find out the information literacy skills possessed by undergraduate Library and Information Science students in Delta State University, Abraka for using electronic resources;
- (2) Identify the various electronic resources used by the undergraduate Library and Information Science students;
- (3) Know the benefits undergraduate LIS students derive from the use of electronic resources and
- (4) Investigate the obstacles faced by undergraduate LIS students on the use of electronic resources.

LITERATURE REVIEW

In recent years, there have been a number of changes in the tertiary education sector in Nigeria and in particular, academic institutions. The emergence of electronic information resources has tremendously transformed information -handling and management in Nigerian academic environments, and university libraries in particular (Ani, Okon & Ahiauzu, 2008). Electronic resources also known as e-resources are accessed electronically and are on different subjects. Electronic resources can be a bibliographic of full text database that allows you to search for relevant articles in your subject area. E-resources includes electronic journals, online databases (Agora, Jstor, Ebscohost, Ajol, Hinari), electronic books, locally loaded database, website, CD-ROM, electronic text, e-abstracting and indexing databases such as MEDLINE, E-news, E-images, E-music etc. These electronic resources are used mainly for reading and research purposes. Some of the electronic resources are in closed-access the institution concern pay for access fee to enable their student's gain-access to the online resources (Ajayi, Shorunke & Aboyade, 2014).

Thanuskodi (2012) opined that e-resources are the electronic representation of information. There are available in various forms like e-books, digital libraries, online journal magazine, e-learning tutors and online test. Because of the effective presentation with multimedia tools, these e-resources have become the source of information. Thanuskodi further agreed that electronic resources delivers the collection of information as full text databases, e-journals, image collections, multimedia in the form of CD, tape, internet, web technology etc. E-resources may include e-journals, e-discussions, e-news, e-data archives, etc can be called as an e-resources. In addition, electronic information source are a wide range of products going from electronic periodicals to CD-ROMs, from mailing list to databases, all of them having a common feature of being used and sometime modified by a computer (Ajayi, Shorunke & Aboyade, 2014).

Julien (2002) observed that information literacy is the ability to make efficient and effective use of information sources, and that an information literate person today should possess specific online searching skills, which include the ability to select appropriate search terminology, construct a logical search strategy, and evaluate information appropriately. Also, it entails individuals' ability to know when there is need for information, how and where to get the information and using such information effectively to accomplish a specific purpose. Shapiro and Hughes (1996) made the following major points in their definition. One, that in its narrowest sense, information literacy includes the practical skills involved in effective use of information technology (IT) and print/electronic information resources. Two, that it is a new liberal art which extends beyond technical skills and conceived as one's critical reflection on the nature of information itself, its technical infrastructure and its social, cultural and even philosophical context and impact.

Furthermore, Issa, Amusan and Daura (2009) citing September (1993) asserted that

students need some level of information literacy skills to make decisions about academic matters and other aspects of their daily lives. As the use of e-resources continues to soar, users are expected to develop information literacy skills. These skills, as Julien (2002) observed will enable users to make efficient and effective use of information sources. Julien further identified the skill domains that are involved and classified them as cognitive, affective, and physical, i.e., thought, attitude, and operation.

Brennan (2002) in his study that centered on how the adoption of electronic information resources has affected academics' information behavior revealed that faculty make fewer visits to the library and read more of electronic books and journals than in the print era. Most academics report use generic databases to locate information while a few rely on smaller discipline-specific databases. Corroborating this, Dilek-Kayaoglu (2008) in a research on use of electronic journals by faculty Students at Istanbul University, also revealed that majority of respondents supported the transition from print to electronic resources because of the numerous opportunity its presents to them. Studies have also been carried out on the use of electronic resources by teachers, students and research scholars of universities and research organizations. Seventy-eight percent (78%) of the respondents feel that the use of the OPAC, e-books, e-mail, e-reference sources, e-journals etc. has created high dependency value on their research work and they needed current article alert services and electronic document supply services (Madhusudhan, 2008).

In the context of developing countries, Okello-Obura and Magara (2008) investigated electronic information access and utilization at the East African School of Library and Information Science, Makerere University, Uganda. Out of the 250 targeted students, 190 responded, giving a response rate of 76%. The study revealed that users derived a lot of benefits from electronic resources such as gaining access to a wider range of information and improved academic performance as a result of access to quality information. Omoisekemi, Eghworo and Ogo (2015) citing Uzuegbu (2012) in his study asserted that for effective utilization of electronic databases, not only are computers and internet connection necessary, creating a usable interface is indispensable. Already, Ani, Okon & Ahiauzu agreed that a computer database interface aids access and retrieval of information. Hence, a URL link is an interface that can help students overcome the problems of obtaining passwords, username, inputting error, among other things when making use of online databases.

Despite several advantages of electronic information resources and its positive effect on students' academic performance in universities, many university students are yet to harness the opportunities provided by these initiatives due to inadequate facilities or lack of maintenance culture and even where these facilities are in place, the potential users of these new information sources are not making use of the valuable electronic information resources owing to lack of awareness or lack of skills required to navigate the modern technology. In the same vein, Oduwole and Akpati (2003) as cited in Ajayi, Shorunke and Aboyade (2014) investigated the accessibility and retrieval of electronic information at the University of Agriculture Library, Abeokuta, Nigeria. The 425 participants responded out of a survey population of 1,000, giving a response rate of 53.87 percent. The study revealed that electronic information cuts across all members of the University community that it was to a greater extent easy to use and were satisfied with their search outputs. The constraints identified included insufficient number of terminals available for use despite high demand and inadequate electricity supply.

A major problem however identified by Egberongbe (2011), are lack of information retrieval skills for exploiting electronic resources, thus making the level of usage of resources by students is very low. However, other less limiting factors were non-availability of e-resources relevant to my information needs (20.0%) and dislike for reading from screen (13.3%). In addition, Damilola (2013) found that poor electricity supply greatly hindered the

use of electronic information resources. This was represented by 117(46.8%) of the respondents and poor internet connectivity was another hindrance which greatly affected the use of electronic information resources, this was confirmed 100(40%) of the respondents. Other factors were insufficient skills, financial problem, poor training programme and excessive academic workload.

METHODOLOGY

The research design adopted for the study is the survey method. The total population for this study is six hundred and ten (610). This consists of all the undergraduate LIS students in Delta State University, Abraka. 10% of the population was used as sample which resulted to 121 undergraduate students in 100level 45, 200level 29, 300level 33 and 400level 14 randomly selected. The research instrument that was used for this study is the questionnaire. It was titled “Information Literacy Skills and Use of Electronic Resources by Undergraduate Library and Information Science Students in Nigerian Tertiary Institutions (ILSUEERULISSNTIQ)”. Copies of the questionnaire were personally administered to the respondents randomly. Their responses were immediately collected.

FINDINGS AND DISCUSSION

This section presents the analysis of the data collected from the questionnaire and discussion of findings of the study. The data was analyzed using simple percentages and frequency counts.

Table 4.1: Information literacy skills possessed by Undergraduate LIS Students

Information literacy skills	Agree	Percentage (%)	Disagree	Percentage (%)	Total
Ability to recognize the information needed	118	97.6	3	2.4	121
Skills to search for information online	117	96.7	4	3.3	121
Skills to evaluate information appropriately	99	81.8	22	18.2	121
Skills to make use of information sources	110	90.9	11	9.1	121
Skills to construct a logical search strategy	35	28.9	86	71.1	121
Skills to incorporate information into one's knowledge base	104	86	17	14	121
Saving and e-resource editing skills	102	71.1	19	28.9	121

In table 4.1, the information literacy skills possessed by Undergraduate LIS Students for using electronic resources were discussed. 118 (97.6%) agreed that they have the ability to recognize the information needed, 117 (96.7%) possessed the skills to search for information online, 110 (90.9%) have the skills to make use of information sources, 104 (86%) have the skills to incorporate information into their knowledge base, 102 (71.1%) possessed saving and e-resource editing skills while 99 (81.8%) possessed the skills to evaluate information appropriately. Though, majority of the respondents do not have the skills to construct a logical search strategy as confirmed by 102 (71.1%) of the respondents. This finding corroborates the observation of Issa, Amusan and Daura (2009) who asserted that students need some level of information literacy skills to make decisions about academic matters and other aspects of their daily lives.

Table 4.2: Electronic Resources used by Undergraduate LIS Students

Electronic Resources	Agree	Percentage (%)	Disagree	Percentage (%)	Total
Websites	121	100	-	-	121
Electronic Books (e-Books)	96	79.3	25	20.7	121
Electronic Journals (e-Journals)	111	91.7	10	8.3	121
Compact Disc – Read Only Memory (CD-ROM)	100	82.6	21	17.4	121
Online Database	68	56.2	53	43.8	121
Internet sources	121	100	-	-	121
e-Discussions	120	99.2	1	0.8	121
e-News	119	98.3	2	1.7	121
e-Data Archives	29	24	92	76	121
Online Magazines	114	94.2	7	5.8	121

Table 4.2 revealed that 121 (100%) agreed that they make use websites and the internet. Other electronic resources used by the undergraduate LIS students include e-Discussions 120 (99.2%), e-News 119 (98.3%), Online Magazines 114 (94.2%), e-Journals 111 (91.7%), CD-ROM 100 (82.6%) and e-Books 96 (79.3%). However, online database and e-Data archives recorded low usability by the respondents as affirmed by only 68 (56.2%) and 29 (24%) of the respondents respectively. This analysis therefore shows that majority of the undergraduate LIS students make use of various electronic resources.

Table 4.3: Benefits of the Use of Electronic Resources by LIS Students

Benefits of Electronic Resources	Agree	Percentage (%)	Disagree	Percentage (%)	Total
Improvement in general communication	120	99.2	1	0.8	121
Instructional delivery to support teaching and research activities	121	100	-	-	121
Relatively easy to use	121	100	-	-	121
High dependency value on research work	88	72.7	33	27.3	121
Access to a wider range of information	121	100	-	-	121
Improved overall academic performance	119	98.3	2	1.7	121
Aids access and retrieval of information	121	100	-	-	121

Table 4.3 reveals the benefits derived by undergraduate LIS students from the use of electronic resources. The benefits include instructional delivery to support teaching and research activities, relatively easy to use, access to a wider range of information and aids

access and retrieval of information as revealed by 121 (100%) of the respondents. Other benefits include improvement in general communication as disclosed by 120 (99.2%), improved overall academic performance as declared by 119 (98.3%) and high dependency value on research work as affirmed by 88 (72.7%). Thus, this analysis declares that the undergraduate LIS students derive a lot of benefits from the use of electronic resources.

Table 4.4: Obstacles on the Use of Electronic Resources

Obstacles to Use of Electronic Resources	Agree	Percentage (%)	Disagree	Percentage (%)	Total
Lack of awareness to electronic information resources	110	90.9	11	1.1	121
Ineffective communication channels	120	99.2	1	0.8	121
Inadequate searching skills	61	50.4	60	49.6	121
Slow internet access	119	98.3	2	1.7	121
Lack of information retrieval skills	32	26.4	89	73.6	121
Unavailability of e-resources relevant to my information needs	14	11.6	107	88.4	121
Excessive academic workload	99	81.8	22	18.2	121
Financial problem	10	8.3	111	91.7	121
Inadequate ICT facilities	36	29.8	85	70.2	121
Erratic power supply	100	82.6	21	17.4	121

Table 4.4 shows the obstacles faced by undergraduate LIS students on the use of electronic resources in Delta State University, Abraka. It is evident that ineffective communication channels, slow internet access, lack of awareness of electronic information resources, erratic power supply and excessive academic workload were the biggest obstacles facing undergraduate LIS students as revealed by 120 (99.2%), 119 (98.3%), 110 (90.9%), 100 (82.6%), and 99 (81.8%) of the respondents respectively. However, it is evident that majority of the respondents did not consider inadequate searching skills, inadequate ICT facilities, lack of information retrieval skills, unavailability of e-resources relevant to my information needs and financial problem as obstacles towards the use of electronic resources as it was only 61 (50.4%), 36 (29.8%), 32 (26.4%), 14 (11.6%) and 10 (8.3%) of the respondents that agreed to these as obstacles respectively. Although, this implies that some obstacles are reprising undergraduate LIS students on the use of electronic information resources in Delta State University, Abraka.

CONCLUSION

After an imminent examination and investigation into the information literacy skills and use of electronic resources by undergraduate Library and Information Science students in Delta State University, Abraka, it was revealed that the prominent role played by electronic resources in the lives of students (both academic and general) cannot be underestimated. The researcher therefore concludes that the undergraduate students of the Department of Library and Information Science are well versed with information literacy skills, which they use to exploit the millions of information available in electronic resources via the internet. Also from the findings, it can be concluded that some issues posed as stumbling blocks to the optimal use of these resources by undergraduate LIS students in Delta State University, Abraka.

RECOMMENDATIONS

Arising from the results of this research, the researcher therefore recommends that:

- (1) Proper and effective communication channels for retrieving electronic information resources are made available to students of tertiary institutions.
- (2) Well-equipped information centres should be made accessible to students of tertiary institutions irrespective of the faculty or department.
- (3) Seminars and workshops should be organized for tertiary students on the skills required for searching, evaluating, retrieving and using electronic resources.
- (4) Awareness campaigns should be organized from time to time on the use and usefulness of electronic information resources to undergraduate students.
- (5) Students should be encouraged to employ the use of electronic resources for both academic as well as for personal enrichment.

REFERENCES

- Ajayi, S. A., Shorunke, O. A. and Aboyade, M. A. (2014). The Influence of electronic resources use on students' reading culture in Nigerian Universities: a case study of Adeleke University, Ede, Osun State. *Library Philosophy and Practice (e-journal)*.
- Ajuwon, G. A (2003). Computer and Internet Use by First Year Clinical and Nursing students in a Nigerian Teaching Hospital. *BMC Medical Informatics and Decision Making* 3 (10): 1472 – 1694.
- American Library Association (1989). *Presidential committee on information literacy: Final report*. Retrieved 30th March 2016 from <http://www.ala.org/acrl/publications/whitepapers/presidential>.
- Ani, A., Okon E. & Ahiauzu, B. (2008). Towards effective development of electronic information resources in Nigerian University Libraries. *Library Management* 29 (6/7): 504 – 514.
- Bar-Ilan, J., Peritz, B. C. & Wolman, Y. (2003). A Survey of the Use of Electronic Databases and Electronic Journals Accessed through the Web by the Academic Staff of Israeli Universities. *Journal of Academic Librarianship* 29: 346–361.
- Bashorun, M., Tunji, I. A. & Adisa, M.Y. (2011). User perception of electronic resources in the University of Ilorin, Nigeria (UNILORIN). *Journal of Emerging Trends in Computing and Information Sciences* 2 (11): 554 - 562.
- Brennan, M. J. (2002). A snapshot of early adopters of e-journals: Challenges to the library. *College & Research Libraries* 63: 515 - 526.
- Bush, A. (2004). Medical Faculty's Use of Print and Electronic Journals: Changes over Time and in Comparison with Scientists. *Journal of the Medical Library Association* 92: 233 – 241.
- Dadzie, P. S. (2005). Electronic Resources: Access and Usage at Ashesi University College. *Campus – wide Information Systems* 22 (5): 1 – 20.
- Damilola, O. A. (2013). Use of Electronic Resources by Distance Students in Nigeria: The Case of the National Open University, Lagos and Ibadan Study Centers. *Library Philosophy and Practice (e-journal)*. Retrieved 3rd May 2016 from <http://digitalcommons.unl.edu/libphilprac>.
- Dilek-Kayaoglu, H. (2008). Use of electronic journals by faculty at Istanbul University, Turkey: the results of a survey. *The Journal of Academic Librarianship* 34: 239 -247.
- Egberongbe, H. S. (2011). The Use and Impact of Electronic Resources at the University of Lagos. *Library Philosophy and Practice (e journal)*. Retrieved 3rd May 2016 from <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1490&context=libphilprac>
- Freeman, E. & Lynd-Balta, E. (2010). Developing information literacy skills early in an undergraduate curriculum. *College Teaching* 58 (3): 109 - 115. doi:10.1080/87567550903521272.
- Gwazah, Y. T. (2011). *An assessment of Availability, Awareness and use of Electronic*

- Resources and Services in the Libraries of the Kaduna State Tertiary Institutions.* Zaria: Ahmadu Bello University.
- Information Literacy Competency Standards (2006). *Standards for Higher Education by American Library Association.* Retrieved 2nd May 2016 from <http://www.ala.org/ala/mgrps/divs/acrl/standards/informationliteracycompetency.cfm>.
- Issa, A. O., Amusan, B. & Daura, U. D. (2009). Effects of Information Literacy Skills on the Use of E-Library Resources among Students of the University of Ilorin, Kwara State, Nigeria. *Library Philosophy and Practice 2009 (February)*. 1 – 12.
- Julien, H. (2002). Use of information. *Encyclopedia of Communication and Information.* USA: Macmillan Reference, 1051 - 1056.
- Kumar, G. T. and Kumar, B. T. S. (2008). *Use of electronic information sources by the academic community: A comparative study*, 6th International CALIBER-2008, University of Allahabad, Allahabad, 684 – 692.
- Madhusudhan, M. (2008). Use of UGC infonet – journals by the Research Scholars of University of Delhi. *Library Hi Tech 26 (3)*: 369 – 386.
- Oakleaf, M. & Owen, P. L. (2010). Closing the 12-13 Gap together: School and College Librarians supporting 21st Century Learners. *Teacher Librarian 37 (4)*: 52 - 58.
- Ojo, R. A. & Akande, S. O. (2005). Students Access, Usage and awareness of Electronic Information Resources at the University College Hospital, University of Ibadan, Nigeria. *Lagos Journal of Library and Information Science 3 (1)*: 16 – 24.
- Okello-Obura, C. & Magara, E. (2008). Electronic Information access and utilization by Makerere University in Uganda. Retrieved 1st May 2016 from <http://creativecommons.org/licenses/by/2-0>.
- Omosekejimi, A. F., Eghworo, O. R. and Ogo, E. P. (2015). Usage of Electronic Information Resources (EIRs) by Undergraduate Students of Federal University of Petroleum Resources, Effurun. *Information and Knowledge Management 5 (4)*: 94 – 103
- Oparah, O. B. and Faloye, J. O. (2011). *Beyond the lesson plan: an eye on teachers' emotion* In Contemporary issues in education, health, and sports: the way forward by B.O, Ogundele, O.A. Moronkola and J.F. Babalola Eds. Ibadan: Department of Human Kinetics and Health Education, University of Ibadan, 13-30.
- Ray, K. & Day, J. (1998) Student attitudes towards electronic information resources. *Information Research 4 (2)*: 1 – 10.
- Sabouri, M. S. (2010) Use of electronic resources by users in the faculty of Agriculture, Islamic Azad University. *Middle-East Journal of Scientific Research 6 (5)*: 490 – 499.
- September, P. E. (1993). Promoting information literacy in developing countries: The case of South Africa. *Africa Journal of Libraries, Archives, and Information Science 3 (1)*: 11 – 22.
- Shapiro, J. & Hughes, S. (1996). Information literacy as a liberal art: Enlightenment proposals for a new curriculum. *Educom Review 31 (2)*: 1 – 10.
- Tenopir, C. (2003). *Use and Users of Electronic Library Resources: An Overview and Analysis of Recent Research Studies.* Washington, DC: Council on Library and Information Resources.
- Thanuskodi, S. (2012). Use of E-resources by the Students and Researchers of Faculty of Arts, Annamalai University. *International Journal of Library Science 1 (1)*: 1 – 7.