Lecturers' use of Online Access to Research in Environment (OARE) Database in Federal Universities, in Southeast Nigeria

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Abstract

The study investigated Lecturers' Use of Online Access to Research in Environment (OARE) Database in Federal Universities in South East Nigeria. Descriptive survey design was adopted. The population size consisted of hundred and eight five (185) respondents of all the lecturers in three universities that their libraries subscribed to OARE database. Questionnaire was used for data collection. Data obtained were analysed using arithmetic mean. Findings of the study revealed that junior environmental lecturer understood more the meaning and use of OARE than senior lecturers, meanwhile, while senior lecturers understood more the requirements of OARE. Environmental science lecturers also agreed that OARE provide extensive link to additional related resources, but the average use of OARE in support of their teaching activities, administrative purpose or lecture preparation is low. Junior lecturers were more active and regular in the use of OARE database than the senior lecturers. Hence this work recommended that it should be included as part of librarians' duties to give orientations at least annually to lecturers on helpful databases like OARE, that can aid their research and academic work.

Keywords: Electronic Database, Online Access to Research in Environment, OARE Use, Lecturers**.**

Introduction

Society is saturated with information that is generated and disseminated from all manner of sources. As the available data grows, managing information becomes more difficult because of information in abundance. Information explosion took centre stage, as its implications to the environment we live in, to the work place, the academic world, and our own peace of mind, increases by the day.To manage the issue of information explosion, a medium was developed, which is Information Communication Technology (ICT). Hence, libraries will find a great wealth of fortune in ICT for managing their ever-increasing resources, especially as resources go electronic. Since there are vast amount of information materials in the electronic form, it becomes a problem managing, updating and organizing them for easy retrieval and access for information clients. Hence, the development of electronic databases was birthed to help in controlling the ever increasing information, organizing, authenticating, preserving them, and ensuring their publicity and access to wider audience.

Electronic database according to Naqvi, (2012) is a large, regularly updated file of digitized information (bibliographic records, abstracts, full-text documents, directory entries, images, statistics) related to a specific subject or field, consisting of records of uniform format organized for ease and speed of search and retrieval and managed with the aid of database management system (DBMS) software. Content is created by the database producer (i.e. Thomson Reuters), which usually publishes a print version (Biological Abstracts) and leases the content to one or more database vendors (EBSCO, OARE, OVID) that provide electronic access to the data after it has been converted to machine-readable form (BIOSIS), usually on CD-ROM or online via the Internet, using proprietary search software (Naqvi, 2012). Scholarly databases as Samaravickrama and Samaradiwakara (2014) discussed, have changed their mode to 'online databases' or 'electronic databases' which are organized digital collections of references to publish literature such as journal articles, newspaper articles, conference proceedings, reports, government and legal publications, patents, books, theses. They have flourished at a phenomenal speed over the past years, and their impact on libraries and users is significant and unprecedented (Yue & Syring, 2014). Since academics experienced the delight of having full-text articles at their desktops anytime and anywhere, online scholarly databases provide a series of modern benefits such as quick and easy accessibility, regular updates, build bibliographies, make citations and recycle demanded information.

Online Access to Research in the Environment (OARE) is a public-private partnership led by the United Nations Environment Programme (UNEP) in partnership with major publishers. It is one of the five pinion of the Research4life initiative. In other words, Research4Life is the collective name for five programmes – Hinari, AGORA, OARE, ARDI and GOALI – that provide developing countries with free or low-cost access to academic and professional peer-reviewed content online.

On the other hand, the use of the OARE database by lecturers is an issue to look into, to enlighten the lecturers on the various uses the database can be put to. Some lecturers might consult OARE to get information resources for a particular purpose like to support their research, to make their lecture notes, for teaching purposes; some might want to know which journals or publishers have the publications that most reflect their area, and which journals to send manuscripts to for publication. This also will definitely reveal how often, environmental science lecturers visit and make use of OARE database; and their reasons for such regularity. Some senior lecturers may think they have over grown the use of OARE database simply because they already have enough publications and are reluctant to upgrade and keep in touch with latest researches of interest. In fact the appealing benefits of OARE seem to be eluding some lecturers as they do not place much value on it. Some lecturers do not know how easy, fast and user-friendly OARE is, or how consistent it is in providing its services and resources. One of the findings of the Aina (2014)'s study on the awareness, accessibility and use of electronic databases among academic staff of Babcock University Business School was that information awareness on electronic resources among lecturers in BBS was inadequate and this affects the accessibility and use of electronic resources.

Statement of the Problem

Despite the interesting nature of resources available in the OARE database, lecturers in the environmental sciences have varying reasons why they use or do not use it. A significant few would seem to exempt themselves and assume that OARE database is not for them either because: they are not aware of the benefits they stand to gain; they feel OARE does not have the quality of journals they need; they have discouraging perceptions about it like being old in age to go back to learning how to use it; or that they have overgrown the use of databases as they are now senior colleagues and lecturers of high rankings and cadres, whose works of esteemed value are the most sought for.

Libraries spend huge amount of money in subscription of databases so that users

will find different and better information resources to what is available in general Google search. If the University has invested much money on e-resources and internet infrastructure, it is expected that those resources are fully utilized. It is on this note that the researcher decided to find out if lecturers in faculties of environmental sciences in South East Nigerian Universities are making adequate use of the OARE database.

Purpose of the Study

The general purpose of this study is to determine the use of OARE database by lecturers in faculties of environmental sciences in federal universities, South East Nigeria.

Specifically the study seeks to:

1. Determining the purpose of using OARE database by Senior and Junior Environmental Science lecturers in Federal Universities in South East Nigeria
2. Ascertaining the regularity of use of OARE database by both Senior and Junior Environmental Science Lecturers in Federal Universities in South East Nigeria

Research Questions

The following research questions were formulated to guide this study:

1. What is the purpose of using OARE database by senior and junior environmental science lecturers in Federal Universities in South East Nigeria?
2. How regular do senior and junior environmental science lecturers in Federal Universities in South East Nigeria use OARE database?

Review of Related Literature

A database, according to Nwokedi, Nwokedi, Chollom, Adah, (2017) is a collection of information that is organized so that it can easily be accessed, managed, and updated. Databases can be classified according to types of content: bibliographic, full-text, numeric and images. Database according to Ojedokun and Owolabi (2003) is a computer programme specifically designed for storing and organizing information. While online database can be defined as computerized store for information, that is accessible through the host computer or across computer networks (Akporido, 2005).

Electronic databases make it easy to rearrange or sort information and they

facilitate for qualitatively diverse types of searches like Boolean algebra logic and hence users can employ AND, OR or NOT to reduce unwanted entries. Electronic publishing is the next demanded feature of online scholarly databases. They shorten the time duration between the paper submission and its publication. However, online databases innovation has today owned a momentous position among research scholars especially in universities.

Online Access to Research in the Environment (OARE) as stated in their website is an online database led by the United Nations Environment Programme (UNEP) in partnership with major publishers. The programme enables developing countries to gain access to one of the world's largest collections of environmental science research. Launched in October 2006, OARE has a mission to improve the quality and effectiveness of environmental science research, education and training in low-income countries. Many organizations are participating in the OARE consortium. Partners providing scientific content through the program include the world's leading publishing houses and the world's most prestigious scientific societies and associations. Today, over 5710 peer-reviewed scientific journal titles owned and published by over 461 OARE partners are now available in more than 100 eligible low income countries.

Environmental science lecturers make use of OARE database in order to support their teaching and research activities. Sinh and Nhung (2012) argued that users' behaviour will influence the usage of e-databases, and that factors that influence usage of databases are the purpose of usage, preferred types of materials, ways to learn the search, search techniques, and difficulties and expectations in using the databases. However, the most influencing factor was the purpose of usage of the database. *Mtega, Dulle, Malekani, Chailla (2014)* opined that generally, e-resources are important for teaching, learning, research and informational purposes. Students, lecturers / tutors, researchers and practitioners are the main users of e-resources. For such resources to be accessed and used ICTs are needed and institutional ICT infrastructure is important in order to ensure optimal usage of such resources. With regard to reasons for using electronic resources, some lecturers use it for communication. Other main uses were for both professional and personal research, supporting teaching activities and administrative purpose.

OARE database has a lot of resources to actually support research and academic activities of lecturers in the environmental sciences, but then, do the lecturers deem

it beneficial to address their information needs? Having in mind that there are individual differences and other factors influencing the way they use OARE, it is pertinent to find out what lecturers benefit from the use of OARE. In a study by Olasore and Adekunmisi (2015) on the use of library electronic information resources by academic staff in Olabisi Onabanjo University, it was revealed that majority of the lecturers made use of library electronic information resources majorly for research and lecture purposes.

The regularity of use of OARE database by lecturers in the environmental sciences has become crucial in evaluating the success story of OARE and its impact. Lecturers are expected to make use of the resources at least each time they engage in research. However, the case remains that most lecturers consult other internet resources outside OARE more often, even when they are aware of it. Ani and Edem (2012) reported a survey conducted to explore the extent of access and use of online databases by academic staff in the University of Calabar, Nigeria. The findings of the study indicated that although vast majority of the academic staff are accessing and using relevant online databases in teaching research, the frequency of usage is rather low, as most respondents only used these databases "occasionally." From the findings, their major factors that impede access and use of online databases by academics in the university include non-subscription of relevant online databases by the university library, cost of access and usage, lack of access to relevant databases and lack of inadequate internet skills for proper access in the university library. Hence, university faculty members report that an increase in their electronic journal usage is accompanied by a decrease in the frequency of their use of print journals (Rogers 2001).

Method

Descriptive survey design was adopted for this study. The study was conducted in Federal Universities, South East Geopolitical zone. Population of 185 of all the Environmental lecturers in the three federal Universities that their libraries subscribed to OARE database. The data required for this research was collected with the aid of researcher's designed questionnaire titled "Environmental Science Lecturers' OARE Use Questionnaire (ESLOUQ). Data obtained for the study were analysed using descriptive statistics and arithmetic mean.

Results

Research Question 1

What is the purpose of using OARE database by senior and junior environmental science lecturers in Federal Universities in South East Nigeria?

Table 1: Use of OARE Database by Senior and Junior Environmental Science lecturers in Federal Universities in South East Nigeria

Items	Senior Lecturers			Junior Lecturers		
	N 70	Mean	Decision	N 90	Mean	Decision
I make use of OARE to support my teaching activities		2.28	Irregular		2.10	Irregular
I use OARE for administrative purposes		2.30	Irregular		2.43	Irregular
I use OARE for Literature search		2.29	Irregular		2.10	Regular
I use OARE to search for new information		3.18	Regular		2.51	Regular
I make use of OARE when I need to access full text articles		3.23	Regular		3.40	Irregular
I use OARE to read abstracts and bibliographic citations		2.31	Irregular		3.50	Regular
I use OARE to support my research work		2.14	Irregular		2.39	Regular
I make use of OARE for lecture preparation		2.56	Regular		2.04	Irregular
I make use of OARE to update my knowledge		2.90	Regular		2.85	Regular
I use OARE because it is less expensive and informative for my discipline		3.20	Regular		2.79	Regular
I make use of OARE because downloading resources from it is easy and fast		3.50	Regular		3.55	Regular
I use OARE because it offers a user-friendly interface		3.00	Regular		3.10	Regular
I prefer using OARE database because it is updated more often than printed database		3.26	Regular		2.81	Regular
OARE provides extensive links to additional resources related contents which intrigues my use of it		3.55	Regular		2.78	Regular
I prefer using OARE because it favours countries classified by the World Bank as low or lower-middle income developing nations		3.53	Regular		3.74	Regular
I use OARE database because it does not need extensive and advanced search skills to use		3.49	Regular		3.14	Regular
Valid N (listwise)						

As seen in Table 1 above, both the senior and junior environmental science lecturers agreed that on a regular basis: OARE provides extensive links to additional resources related contents which intrigue their use of it (3.55& 2.78), they prefer using OARE on a regular basis because it favours countries classified

by the World Bank as low or lower-middle income developing nations (3.53& 3.74), they make use of OARE more regularly when they need to access full text articles (3.50& 3.55), they also regularly use OARE database because it does not need extensive and advanced search skills (3.49& 3.14), they furtherregularly use OARE because it is less expensive and informative for their discipline (3.20& 2.79). However, both the senior and junior lecturers do not regularly make use of OARE to support their teaching activities (2.28& 2.10), neither do they use OARE for administrative purposes (2.30& 2.43) or for literature search (2.29& 2.39). They further do not make use of OARE for lecture preparations.

Research Question 2

How regular do senior and junior environmental science lecturers in Federal Universities in South East Nigeria use OARE database?

Table 2: Regularity of Use of OARE Database by Environmental Science lecturers in Federal Universities in South East Nigeria

Items	Senior Lecturers			Junior Lecturers		
	N 70	Mean	Decision	N 90	Mean	Decision
I make use of OARE to support my teaching activities		2.28	Irregular		2.10	Irregular
I use OARE for administrative purposes		2.30	Irregular		2.43	Irregular
I use OARE for Literature search		2.29	Irregular		2.10	Regular
I use OARE to search for new information		3.18	Regular		2.51	Regular
I make use of OARE when I need to access full text articles		3.23	Regular		3.40	Irregular
I use OARE to read abstracts and bibliographic citations		2.31	Irregular		3.50	Regular
I use OARE to support my research work		2.14	Irregular		2.39	Regular
I make use of OARE for lecture preparation		2.56	Regular		2.04	Irregular
I make use of OARE to update my knowledge		2.90	Regular		2.85	Regular
I use OARE because it is less expensive and informative for my discipline		3.20	Regular		2.79	Regular
I make use of OARE because downloading resources from it is easy and fast		3.50	Regular		3.55	Regular
I use OARE because it offers a user-friendly interface		3.00	Regular		3.10	Regular
I prefer using OARE database because it is updated more often than printed database		3.26	Regular		2.81	Regular
OARE provides extensive links to additional resources related contents which intrigues my use of it		3.55	Regular		2.78	Regular
I prefer using OARE because it favours countries classified by the World Bank as low or lower-middle income developing nations		3.53	Regular		3.74	Regular
I use OARE database because it does not need extensive and advanced search skills to use		3.49	Regular		3.14	Regular
Valid N (listwise)						

From Table 2, it would be seen that senior lecturers do not support their teaching activities with OARE database (1.55) while the junior lecturers do (2.55).When doing collaborative studies, senior lecturers do not use OARE database (1.65)

while the junior lecturers make use of it (2.50). The table also shows that when senior lecturers need new information in environmental sciences they do not use OARE (2.00) while their junior counterpart use the database when in need of such information (2.50). While senior lecturers agreed not to use OARE database at all with a mean response of (2.70) junior lecturers rejected the statement with a mean response score of (1.75). The choice of using other search engines made senior lecturers overlook using OARE (2.83); which is not the same as with the junior lecturers (1.90). Furthermore, senior lecturers agreed that the higher they grew in career, the lower their frequency of using OARE database (2.98) which is not the case with junior lecturers (1.85).

Discussion

The result obtained from research question oneindicates that the environmental science lecturers agreed that OARE provides extensive links to additional resources related in contents which intrigues their use of it, and they prefer using OARE because it favours countries classified by the World Bank as low or lower-middle income developing nations. They also make use of OARE because it does not need extensive and advanced search skills, and because it is less expensive and informative for their discipline. In support, Egberongbe (2011) in his study revealed that majority of lecturers preferred to use e-resources in comparison to traditional resources, with many considering e-resources as time-saving, easy to use, more useful, informative and less expensive.

The result obtained from research question 2 reveals that the findings on the regularity of use of OARE showed that senior lecturers do not support their teaching activities with OARE database unlike the junior lecturers; even when doing collaborative studies. On the contrary, Renwick (2005) in a study found that there is a high level of usage of open access resources by faculty in their research and professional growth. Renwick's resultsindicated that high level of usage of open access publications by both senior and junior lecturers can only be accounted for in terms of sourcing and retrieving its content for their research as the result show that both categories of lecturers rarely self-archive their research on the internet.

Conclusion

The environmental science lecturers in South East Nigeria showed positive responses in their use of OARE database, because they believed that OARE

provides extensive links to additional resources related contents which intrigues their use of it, and they prefer using OARE because it favours countries classified by the World Bank as low or lower-middle income developing nations. They also make use of OARE because it does not need extensive and advanced search skills, and because it is less expensive and very informative for their discipline. Unfortunately, they do not make use of OARE to support their teaching activities neither do they use OARE for lecture preparations.

Recommendations

The following recommendations have been made based on the findings and conclusions made in this study.

Library management should give orientation at least annually to lecturers on helpful databases like OARE, which can aid their research and academic work; this will no doubt update their knowledge on recent researches and trends in their field.

University management should emphasize on the stability of internet and power issues in universities, as it forms one of the major challenges to the use of OARE established by the present research.

Most times lecturers complain of having busy academic schedule and tasks that exploring these database options like OARE becomes huge task. This can be ameliorated by reducing and redistributing lecturers' workloads to ensure equity and fairness to themselves, their duties, and their research lives through databases.

References

Aina, R. F. (2014). Awareness, accessibility and use of electronic databases among academic staff of Babcock University business school.*Kuwait Chapter of ArabianJournal of Business and Management Review,* 3(6), 40-47. https://www.arabianjbmr.com/pdfs/KD_VOL_3_6/4.pdf

Ani, O. & Edem, N. (2012).Access and usage of online databases in Nigerian Universities in teaching/research.*Library and Information Practitioner*, 5 (1 & 2), 475–486.

Mtega, W. P., Dulle, F., Malekani, A. W. &Chailla, A. (2014).The usage of e-resources among agricultural researchers and extension staff in Tanzania. *Library and Information Research*, 38 (119).

Naqvi, T. H. (2012). Use of electronic databases by postgraduate Students and Research Scholars at GBPUAT Library.*IndiaLibrary Philosophy and Practice (e-journal)*.http://digitalcommons.unl.edu/libphilprac/809

Nwokedi, V. C., Nwokedi, G. I., Chollom, K. M., &Adah, J. E. (2017).**Assessment**

of online usage patterns of elselvier database amongst academics of environmental sciences, University of Jos. 5(2), 83-91. Accessed: http://www.academicresearchjournals.org/IJALIS/Index.htm

Olajide, O. & Fabunmi, F.A. (2011).Lectures' perception of the adequacy of resources and services of University Ado-EkitiLibrary. *Library Philosophy and Practice (e-journal).*Paper 666. Available at: http://digitalcommons.unl.edu/libphilprac/666.

Olasore, R. E., & Adekunmisi, S. R. (2015).Use of library electronic information resources by academic staff in Olabisi Onabanjo University. *Global Advanced Research Journal of Educational Research and Review,* 4(4), 055-062. Accessed at:http://www.ijessnet.com/wp-content/uploads/2014/08/8.pdf

Rogers, S.A. (2001). Electronic journal usage at Ohio State University. *College& Research Libraries*, 62(1), 25-34.

Samaravickrama, P. G. &Samaradiwakara, G. D. (2014). Predicting faculty members adoption of online databases by diffusion theory approach: case study at the University of Sri Jayewardenepura in Sri Lanka.*International Journal of Technical Research and Applications.* 2(7), 87-97. www.ijtra.com/special- issue- view/

Sinh, N. H., & Nhung, H. T. H. (2012).Users' searching behavior in using online databases at Vietnam National University, Ho Chi Minh City. *Library Management,* 33(8/9), 458 - 468

Velmurugan, C. (2013). Use and user perception of electronic information resources: A case study of Siva Institute of Frontier Technology, India. *Chinese Librarianship: International Electronic Journal*, 36. URL: http://www.iclc.us/cliej/cl36chandran.pdf

Yue, P. W. &Syring, M. L. (2004). Usage of electronic journals and their effect on interlibrary loan: a case study at the University of Nevada, Reno. *Library, Collections, Acquisitions & Technical Services*, 28 (4)4, 420-32.Available:http://www.tandfonline.com/doi/abs/10.1080/14649055.2004.1076