E-ABSTRACT INFORMATION SEARCH ENGINES IN ACADEMIC LIBRARIES: IMPLICATION FOR ACCESS AND ACQUISITION OF EDUCATIONAL EXPERIENCES

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ABSTRACT

This study investigated the effect of e-abstract information search engines on the utilization of information resources for promotion of Access and acquisition of educational experiences in academic libraries. Population of study was 1708 library registered students drawn from the Federal Universities of Calabar and Uyo. Of this, 1,200 students constituted the sample representing 80% of the population of study. A structured research questionnaire instrument was developed and administered to draw responses from the sample of study. The combined result showed significant positive responses in the use of e-abstract search engines in academic libraries in the promotion of access and acquisition of educational experiences in the two universities.

KEYWORDS: E-Abstract, Search Engines, Academic Libraries, Access, Acquisition

INTRODUCTION

The basic aim of the library is to meet the information needs of its users. These users include students offering various and varying courses and programmes as well as their lecturers and other researchers seeking one piece of information or the other. According to Oriaku (2014), an organization that can provide better knowledge and organized information service to its employees will be able to provide them requisite know-how to handle problems. The implication of the above is that utilization of variable information resources must be considered as a major factor in any attempt at improving quality of life of individuals. Thus, the growth in the amount of online information has prompted many Libraries and other information centres to embark on the reorganization of their collection to satisfy the increasing surge for online information access and utilization. This they do through installation of e-abstract devices that will lead information seekers to abstract information resources in their libraries. Stressing the need for uninterrupted access to the needed and choice of information, McHale (2005) advised strongly that no obstacles from anywhere must be placed to deprive information seekers of the knowledge they seek through their use of the information resources in the Library. It is from this stand point that academic libraries'
sponsors acquire and install e-abstract search engines and other e-devices to give unhindered opportunities to users for effective utilization of e-information resources available in the library. In other words, many academic libraries are now going virtual thereby necessitating the need for the use of online resource materials they store in their collection. This study therefore focused on the University of Calabar and Uyo e-libraries. At the time of the study, the E-library of the University of Calabar had 850 registered library science students who regularly patronized it. This section of the library had over 100 computer sets. The University of Uyo e-library on the other hand, had 858 registered library science students with over 100 computer sets. For purposes of the study, enquiry with regard to available search engines revealed that the patrons of these e-libraries could access online information through a number of platforms except those whose subscription had elapsed. These included Trade Law Guide, Ebsco-Host, Research Tutorial, Law pavilion, Research Guide, Jstor, Lexis Nexis, HINARI and the NUC virtual library.

OBJECTIVES OF THE STUDY
In view of the impact of ICT on information sourcing, utilization and storage, this study investigates the effect of e-abstract search engines on the utilization of information resources for provision of access and acquisition of educational experiences by students of Universities of Calabar and Uyo. Therefore, the study will be guided by the following research questions:
1. What are the e-abstract search engines available in the University of Calabar and Uyo libraries?
2. What is the extent of use of the available e-abstract search engines?
3. What are the problems militating against the students' access of e-abstract search engines in these universities.

LITERATURE REVIEW
Bullon (2003) says any word prefixes with hyphenated letter "e-" means something to do with the internet. In other words, any term prefixed with letter "e" and a "-" (hyphen) has to do with transactions on-line with search engines as manipulated tools. e-abstracts are therefore on-line information resources serving as access, retrieval and utilization devices stored in libraries with the ICT instruments for use by users in their quest for knowledge. An abstract is a brief write-up. According to Manzer (2002) an abstract is a summary of a publication or article with adequate bibliographical information to aid access and use of publications with ease. Because there is usually a large amount of information available in different subject areas and disciplines, Bernier (2002) highlights nine reasons showing abstract as useful tools for students' utilization of information resources in Libraries. The reasons according to the researcher include:
1. Due to large volumes of published items yearly, it is usually difficult and sometimes impossible for students to locate desired information. Abstracts therefore facilitate their location access and use.
2. Documents are written in many languages, abstracts help in the translation of document to students' own languages.
3. Abstracts in many cases substitute for the original literature.
4. Abstracts save the time of students in search for literature through reading or scanning the abstract.
5. Classified abstracts in published journals bring together guides to appreciable volumes of knowledge.
6. Searches in retrospect are usually aided by classified abstracts.
7. Abstracts help in accuracy of selection of literature to be read more than that of selection from titles of annotation.
8. Abstracts facilitates indexing processes
9. Abstracts facilitate organization of articles, bibliographies, reviews and talks, p.16-17.
Abstracts are by-products of analysis of documents which contributes to communication and information flow (Rowley, 1988). It is clear from this perspective that e-legal abstract, for example, facilitate communal link between students and other clients to the law library resources where there is ease of location and use of on-line legal information documents, whether of the e-law journals, e-law articles and/or e-law reports, etc.
Okafor (2006) conducted a research on abstract as an important access and retrieval device. The researcher used the descriptive survey method in highlighting the indices that may influence the use of abstract information materials in libraries. These according to him include proper abstracting, availability of search and retrieval engines as well as functional internet facilities. The study revealed that students and other researchers and seekers of knowledge embraced e-abstract search engines for their source of online abstracts needs. The study revealed that,
the use of abstracts devices makes the access, search and retrieval of information less cumbersome.

Tyckoson (1991) posits that abstracts are primary access points to stored information sources. This assertion applies to all e-subject abstracts where these are stored in electronic formats in the e-library. E-law abstracts are therefore access and retrieval devices. They help in the use of desired online information resources, as well as aid students and other users in their academic and research work. Abstracts have been accepted as a summary of a work in any discipline, (Weihs 2004). Thus it can positively be assumed that e-abstracts are brief summaries of works published on-line. According to Weihs (2004), abstracts are always located at the beginning of the article and would thus help students and researchers to quickly select research topics.

Lehner (1998) stresses the importance of abstracts in the use of information resources. According to the researcher, an abstract was used to discover a solution to the construction of new details in gravitational radiation in the United States, Europe and Japan, and the abstract was tagged “the science abstracts”. Adomi (2012) observed that abstracts are resources from which people receive ideas meaningful messages, enlightenment and direction that will enable them to accomplish tasks, take decisions and solve problems. Thus, e-abstracts search engines categorized as automated sources, are very important for the utilization of online information resources, (Nnadozie, 2014). The position also accords with the University of Sydney (2012) report that non-print sources such as internet sites are important information sources in some disciplines.

It is incontrovertible fact that one of the most significant achievements in the information and communication sector is the introduction of advanced communication management network system like the internet. This is the technology that can connect a computer with millions of other computers in the network system. With this mode of communication, internet services are being exploited and utilized by information seekers and users in every sphere of human endeavour. Thus in a standard e-library and other e-resource centres with a good e-collection content, there is sure to be massive patronage by those desiring one form of information or other for use.

According to Ryan (2012) certain types of information that are likely to be found on the internet are scientific and technical information, historical and humanities information, cultural, entertainment as well as legal and allied information. Thus, to access these information materials, law and other academic libraries’ electronic search engines are requisite tools to facilitate access and utilization of the needed information from the internet.

Conducting a study on the use of ICT search engines and devices in teaching and learning, Ani (2007) observed from the study about the usage of ICT search engines in academic libraries by academic librarians and students to ease their workload in administrative and information acquisition responsibilities. The study was conducted using academic librarians and students of selected universities where 61.3% of the respondents professed to their use of the computer in their teaching and research work. The study further showed that academic librarians and students who use the library made wider use of computers in performing variety of application software packages including the OPAC for online search and retrieval of information.

Ajayi (2005) posits that it is not the size of a library collection that matters but the organization of materials in the collection for ease of accessibility though the ICTs seems the prime necessity. The author goes on to aver that with the ICTs, Online Public Access Catalogue (OPACs) access of electronic serials, online textbooks and other online publications on law and other subject areas will be practicable.

Ifidon (1994) undertook a study on the uses and abuses of information resources of libraries in the developed and developing countries. The study revealed that information resources in libraries of institutions in the advanced countries were more “consciously” and “productively” used than in those of the developing countries. The author opined that the degree of success of any economic and industrial development depended on the extent to which libraries’ information resources are accessed and utilized. He therefore recommended that policy makers should, as a matter of necessity, appreciate the role of libraries in the nation’s development agenda.

Bramoh, Jegede and Moshoeshoe (1997) undertook a study to ascertain the level and extent of utilization of information in the library. The researchers sampled two hundred undergraduates of the national University of Losotho. The survey revealed that students of this university used the library for various reasons; some of which were to search for information to do assignment to socialize with
friends online includes others. The researchers recommended that sponsors of libraries should provide basic skills and ICT infrastructures to enhance students’ optimum utilization of university library’s information resources.
In the same direction, Bellow (2000) undertook a survey to ascertain the extent of usage of library information resources and services by students in their institutions. It was also the objective of the study to discover areas of weakness in terms of effective usage of the available information resources in the libraries of study for possible output. With the questionnaire item instrumentation format, findings of the study revealed that there was high rate of students’ usage of online information resources. The author recommended that the proprietors of libraries should improve the infrastructures in these libraries with particular emphasis on the provision of online software devices to make the utilization of the e-resources devices in the libraries accessible.

**RESEARCH METHODOLOGY**

Survey method was adopted for the study. The study was carried out during the 2017/2018 academic session. The population of study comprised 1708 Library registered students that made up of 850 for University of Calabar and 858 for University of Uyo. Questionnaire constructed in line with the objectives of the study was randomly administered to these library science students as they visited the library. Respondents who returned copies of the questionnaires amounted to 1,200. This number therefore constituted the sample for the study from which data was collected, collated and analysed.

**RESULTS AND DISCUSSION**

**Table 1:** Distribution of responses by library science students of University of Calabar and University of Uyo

<table>
<thead>
<tr>
<th>S/N</th>
<th>Type of search engine</th>
<th>Unical sample size (N) (%)</th>
<th>Uniuyo sample size (N) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Trade Law Guide</td>
<td>520 (42%)</td>
<td>-</td>
</tr>
<tr>
<td>2.</td>
<td>Ebsco Host</td>
<td>540 (45%)</td>
<td>630 (52.5%)</td>
</tr>
<tr>
<td>3.</td>
<td>Research Tutorial</td>
<td>420 (35%)</td>
<td>420 (35%)</td>
</tr>
<tr>
<td>4.</td>
<td>Research Guide</td>
<td>770 (64%)</td>
<td>-</td>
</tr>
<tr>
<td>5.</td>
<td>Law Pavilion</td>
<td>580 (48.3%)</td>
<td>620 (61.6%)</td>
</tr>
</tbody>
</table>

The results of this study beginning with table 1 revealed that there was significant positive responses in the use of the sampled e-abstract search engines in academic libraries in the promotion of access and acquisition of educational experiences in the universities of Calabar and Uyo. Looking at the table, it is clear that none of the Universities under study, had less than 50% of the number of the sampled search engines. University of Calabar library had four (4) out of the five (5) e-abstract search engines while university of Uyo had three (3) out of the five (5) search engines.

This aligns with the view of Okafor (2006) who revealed that students and other researchers and seekers of knowledge embraced e-abstract engines for their source of online abstracts needs. This, according to the author, is because the use of abstract devices makes the access, search and retrieval for use of information less cumbersome. Of course, this brings in the element of availability of e-abstract search engines in the first place.

Table 2 shows the distribution of the various types of e-abstract search engines as available in the two universities under investigation.
Table 2:
E-abstract search engines availability in University of Calabar and University of Uyo

<table>
<thead>
<tr>
<th>S/N</th>
<th>Type</th>
<th>Unical Available (Yes)</th>
<th>Unical Not available (No)</th>
<th>Uniuyo Available (Yes)</th>
<th>Uniuyo Not available (No)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Trade Law Guide</td>
<td>520</td>
<td>680</td>
<td></td>
<td>1200</td>
</tr>
<tr>
<td>2</td>
<td>Ebsco Host</td>
<td>540</td>
<td>660</td>
<td>630</td>
<td>570</td>
</tr>
<tr>
<td>3</td>
<td>Research Tutorial</td>
<td></td>
<td>1200</td>
<td>420</td>
<td>780</td>
</tr>
<tr>
<td>4</td>
<td>Research Guide</td>
<td>770</td>
<td>430</td>
<td></td>
<td>1200</td>
</tr>
<tr>
<td>5</td>
<td>Law Pavilion</td>
<td>580</td>
<td>620</td>
<td>620</td>
<td>580</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 2 shows that of the five (5) types of e-abstract search engines considered, University of Calabar had four (4) functional online search devices which are Trade Law Guide, attested to by 520 respondents. For Ebsco Host, 520 respondents acknowledged its availability. Research Guide and Law Pavilion’s availability were attested to by 770 and 580 respondents respectively. In its library, the University of Uyo, on the other hand, had three (3) functional online abstract search engines in its library. These were Ebsco Host, attested to by 630 respondents, Research Tutorial by 420 respondents and Law Pavilion by 620 respondents. The remainder of respondents that make up the sample either ticked yes or left the column blank after ticking the ‘yes’ column. It must be stated that at the time of this study, the two institutions had other online search engines but were not functional on account of access subscription lacks. This category consisted of JSTOR, Lexis Nexis, HINARI and NUC virtual Library among others. From the table, it is clear that the two institutions fared better with regard to availability of the sampled e-abstract search engines as indicated by the respondents. With regard to University of Calabar, it is only the Research Tutorial that is not available in the Library as indicated by the respondents. In the same vein, respondents in University of Uyo indicated that the institution had no Trade Law Guide and Research Guide search engines in its Library, with all the 1200 students sampled giving negative responses regarding those e-abstract search engines. Further, responses in table 2 regarding the rest of the search engines show that Unical has Trade Law Guide (as confirmed by 520 respondents), Ebsco Host (540), Research Guide (770) and Law Pavilion (580). On the other hand Uniuyo has Ebsco Host as confirmed by 630 respondents, research Tutorial (420) and Law Pavilion (620) respectively.

Table 3:
Utilization of e-abstract search engines by students of University of Calabar and University of Uyo

<table>
<thead>
<tr>
<th>Students’ utilization of e-abstract search engines</th>
<th>Unical</th>
<th>Uniuyo</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of Trade Law Guide</td>
<td>520</td>
<td>_</td>
<td>520</td>
<td>42%</td>
</tr>
<tr>
<td>Use of Ebsco Host</td>
<td>540</td>
<td>630</td>
<td>1170</td>
<td>91%</td>
</tr>
<tr>
<td>Use of research Tutorial</td>
<td>380</td>
<td>420</td>
<td>800</td>
<td>80%</td>
</tr>
<tr>
<td>Use of Research Guide</td>
<td>770</td>
<td>_</td>
<td>770</td>
<td>77%</td>
</tr>
<tr>
<td>Use of Law pavilion</td>
<td>580</td>
<td>620</td>
<td>1200</td>
<td>100%</td>
</tr>
</tbody>
</table>

From the result as represented in table 3, it is obvious that majority of library registered students in the two universities of this study substantially utilized the e-abstract search engines available to them respectively. The distribution in the utilization level shows that 520 library students (Unical) accessed Trade Law Guide (42%), while 770 library students (Unical) accessed Research Guide representing 77% of the sample. The table also shows that 1170 (91%) library students of both Universities accessed the Ebsco Host online abstract device. The Research Tutorial and the Law Pavilion devices had a patronage of 800 (80%) and 1200 (100%) respectively during the period under review. Aligning the findings as shown in this
Table 4:
Percentages of students’ responses of problems militating against their Access of Information through E-abstract search engines.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Items</th>
<th>Frequency/Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>True</td>
</tr>
<tr>
<td>1.</td>
<td>Poor knowledge of the online search engines available</td>
<td>1200 (100%)</td>
</tr>
<tr>
<td>2.</td>
<td>Inability of students to exploit information from available e-abstract search engines.</td>
<td>864 (72%)</td>
</tr>
<tr>
<td>3.</td>
<td>Inadequate e-abstract search engines</td>
<td>770 (64%)</td>
</tr>
<tr>
<td>4.</td>
<td>Inadequate Computers</td>
<td>570 (47.5%)</td>
</tr>
<tr>
<td>5.</td>
<td>Poor power supply</td>
<td>630 (52.5%)</td>
</tr>
<tr>
<td>6.</td>
<td>Lack of competent virtual Librarian</td>
<td>120 (10%)</td>
</tr>
</tbody>
</table>

The researchers also undertook to find out what problems could hamper possible access of e-abstract information by the students. Table 4 shows the reaction of students regarding suggested problems listed in a requisite part of the questionnaire administered.

Analyses of the responses on the table showed that all the respondents 1200 (100%) agreed that their poor knowledge regarding on-line search engines available militate against their access and use of e-abstract search engines. Closely following is the students inability to exploit available e-abstract search devices. 864 (72%) of the respondents agreed it was true that they lacked the know-how to exploit the e-abstract search engines. 290 (24.1%) of them partially agreed with the majority while 156 (13%) said it was not true that they lacked the know-how to exploit the e-abstract devices. With regard to inadequate e-abstract search engines, 770 (64%) of the respondents said this militated against their access bids. The recurring respondents of the sample 430 (35.8%) partially agreed to this. Another suggested militating factor was inadequate computers. 570 (47.5%) respondents said this impeded their information access bid through e-abstract search engines while 540 (45%) regarded this as partial factor. 90 (7.5%) of the students did not agree that this militated against their access bid. Poor power supply was another suggested factor. On this 630 (52.5%) respondents said this militated against their access efforts while 473 (39.4%) said this partially militated against their access bids. On lack of Virtual Librarian as militating factor, only 97 (8.8%) of the respondents did regard that it impeded their access bid. Analysis of the data showed that 826 (63.83%) of the respondents did not agree that this was a militating factor, 254 (21.16%) said that was a partial factor while 120 (10%) of the respondents affirmed the task in that lack of competent virtual librarian militated against their access through e-abstract search engines.

A close appraisal of table 4 according to the analyses therein, revealed that the suggested militating factors variously affected the students’ bid to accessing on-line information using e-abstract search engines. Looking at the responses percentages, it is clear that there is need to address manifest lacks and impediments that could militate against access and utilization of e-abstract information through e-abstract search engines.

CONCLUSION
This study examined e-abstract search engines in academic libraries and their effect on access and utilization of online information resources by students of Universities of Calabar and Uyo. From the findings of the study it could be concluded that e-abstract search engines impact on and relate positively with access and utilization of online information resources in academic libraries. This is because online information cannot be accessed without requisite
e-access tools among which e-abstract search engine is one.

RECOMMENDATIONS
From the findings of the study, the following recommendations are made:
1. Sponsors of academic libraries should provide basic training for virtual librarians in their employ to deliver quality library service(s).
2. Internet facilities in university libraries should be well managed in terms of provision and maintenance to ensure continuous workability.
3. Library information delivery services being more of a social nature should attract minimal fees where necessary to encourage continuous quality research.
4. There should be on a larger scale, user education on the ICT for the library science students to sharpen their skills in the information search and usage.

REFERENCES


