This paper investigated the problems militating against the effective utilization of open access journals among LIS students at the University of Calabar. A total of 206 copies of questionnaire were administered and 200 were duly completed and returned. A descriptive survey research design was adopted to gather information from the 200 LIS students. The data collected were analyzed and presented in tables using descriptive statistics. Findings revealed that inadequate computers, inadequate advocacy, Electricity interruption, Difficulty reading computer screens, inadequate internet skills to access open access journals and lack of knowledge of the existence of open access journals were among the problems militating against the effective utilization of open access journals. More computer and computer terminals or work station, awareness programmes, adequate funding, expertise, infrastructure, electricity and high bandwidth were highly recommended.

Keywords: open access journals, inadequate computers, inadequate advocacy, Electricity interruption, Difficulty reading computer screens, inadequate internet skills


INTRODUCTION

In most tertiary institutions of higher learning in Africa and Nigeria in particular, undergraduates find it difficult to cope with their academic work and also to write their project work in partial fulfillment for the award of Bachelor degrees /HND/ND degrees in various disciplines of learning. (Ogbomo & Ivwighreghweta, 2003). According to Wiley (2014), over the past two decades, the price of subscriptions to academic journals has increased tremendously, to the point where they are often out of reach for undergraduates, even at the most well funded institutions. Many journals now cost in excess of $10,000 per year, with a few peaking at over $25,000 per year (Wiley, 2014) and libraries can’t afford access to them all. For example, MIT has had to increase its journal budget by over 360% over 20 years to keep up with journal price increases, and the University of California-Berkeley has increased their journal expenditures by 1,300% over roughly the same period (Smith, 2013).

Many tertiary institutions don’t have the financial resources to keep up with journal subscription, so they’re forced to make choices which mean that students will have little or no access to core disciplinary journals and...
must base their education on what is available rather than what they need. In 2010 alone, the University of Georgia cancelled subscriptions to nearly 600 journals. Unfortunately this seems to be the trend among colleges and universities rather than the exception. (Tuoff & Heltz, 2011)

Open Access means free accessibility of all published knowledge in the world. This includes any kind of print or scholarly publication that is published and can be accessed through the Internet free of charge (Bailly, 2006). A lot of worldwide scholarly journal literature be freely available to all regardless of whether or not the researcher worked at the Harvard or small Liberal Arts College, or he/she was in the United States or Zambia or Nigeria (Bailly, 2006). Studies by Ogboro and Ivwighrehweta (2013) showed that there are lots of benefits derived from the use of Open Access Journals with the weighted average of 3.30. In their studies the respondents noted that the major benefit derived from the use of open access journals is that it increases impact of researchers work (Means = 3.47; SD = .53). This means that the researcher’s works are been used and highly cited.

According to Fatunde (2008), the development of information and communication has provided students and researchers with a very high level of visibility on the web. As a result, teaching, learning and research is widely improved in most tertiary institutions today. The intellectual call for knowledge and information dissemination by countless organizations and educational meetings has given birth to a terminology called open access. Moller (2004) pointed out that despite many opportunities that open access offers, many students are yet to utilize the privilege offered by these resources. Many institutions have not encouraged faculties and students to contribute to or access open access journals materials which are relevant to their academic survival. On a positive note, some universities like the University of Western Cape have launched an Open Content project to have students and staff participates in OA. African scholars have continually relied on e-papers from developed countries. Open Access to knowledge will no doubt enhance accessibility of available scholarly publication and as well reduce cost effect. In recent times, the value of libraries reduced drastically as they are no more able to satisfy users with expected scholarly publications they need. Similarly the high cost of subscription rate affects library acquisition (Ivwighrehweta 2012). Inspite of the numerous advantages and opportunities that open access journal offers there are impediments to their usage.

**RESEARCH QUESTIONS**

1. What are the problems militating against the usage of open access journals among LIS students in the University of Calabar?

**LITERATURE REVIEW**

The problems and challenges militating against the use of open access journals by students in Nigerian universities have been highlighted by some authors. Fatunde (2008, Ogboro and Ivwighrehweta 2012) observed that poor electricity supply, problem of funding, telecommunication connectivity and human expertise are factors militating against the use of open access journals. IFLA had declared that implementation of ICTs need sustainable technology strategies and policies. IFLA noted problems of digital gap issues, internet connectivity, bandwidth issue, inadequate ICT facilitates (computers) and technical expertise.

Okoye and Ejikeme (2010) identified inadequate skills to navigate the internet, unstable power supply, unavailability of internet facilities, permanence of open access movement due to unstable financial support, inadequate knowledge on the existence of open access journals in the internet and the unpredictable nature of open access journals as constraints to the use of open access journals by researchers.

Giarlo (2005) and Canada (2009) identified the following problems as militating against effective use of open access journals to include: Internet and information and communication technologies, Inadequate advocacy and misconceptions, Managing intellectual property rights through alternative publishing agreements, Long-term preservation of open access materials, Quality of open access publications, Difficulty reading computer screens and Indexing.

Echezona and Ugwuanyi (2010) narrate that the poor nature of Internet speed infringe on the usefulness of the connections and is a real barrier to using e-resources. Their work further reveals the survey of ATICS in 2006, which compared the bandwidth kbps (kilobits per second) of African academic institutions and accounts that the University of Jos and Bayero University are the only academic institutions in Nigeria listed among the first ten countries in Africa. Universities in Nigeria face serious challenge of insufficient bandwidth, while the students, researchers and scholars require fast and reliable internet connection to be able to have access to open access scholarly journals. According to Jensen (2006), “bandwidth is the life-blood of the world’s knowledge economy, but it is scarcest where it is most needed in the developing nations of Africa which require low cost communications to accelerate their socio-economic development. Few schools and public libraries on the
continent have internet access.” A survey for African Tertiary Institutions Connectivity Survey (ATICS) carried out by the African Virtual University in 2005 showed the average African university has bandwidth capacity equivalent to a broadband residential connection available in Europe, pays 50 times more for their bandwidth than their educational counterparts in the rest of the world, and fails to monitor, let alone manage, the existing bandwidth (ATICS, 2005). As a result, what little bandwidth available becomes even less useful for research and scholarship purposes. Also in a study of internet usage in Nigerian universities by Jagboro (2003) shows that 45.2 percent of the respondents access the internet through internet cafes. Ivwighreghweta and Onoriode (2012) revealed that there are many constraints to the use of open access articles. 60 (43%) respondents strongly agree and 68 (49) agree that the unavailability of Internet facilities is a constraint to the use of OA. 70 (50%) respondents strongly agree and 54 (36%) agree that lack of knowledge of the existence of OA is also a factor.

Hamel (2005) stated that telecommunication challenges like bandwidth allocation, and weak communication and social infrastructure have not only blocked information flows but ultimately stifled social and economic development. Internet connection is a key to OA. Despite a very rapid rate of the Internet growth, Africa still lags behind in Internet connectivity with barely 1% of Internauts in Africa and the Middle East. Scientists who are not connected to the Internet are excluded automatically from publishing in, and benefiting from, a growing number of journals, because many new journals are created online while many old ones now often have online counterparts. In Nigeria, due to the high cost of availability of ICTs and connectivity and poor telecommunication infrastructure, access to open access journals is often problematic. This makes the actual use of any open access journals and implementation of software more difficult (Giarlo, 2005, Canada, 2009).

Although OAJ offers free access to information, there needs to be some funding to take care of Internet subscriptions, designing of tools, management, and availing technology. Most African economies are constrained or have other priorities and would invest in OA only if their budgets are surplus (Raney, 1998).

Suber (2004) listed four major challenges to the success of OA:

- Filtering and censorship barriers. Many schools, employers, and governments want to limit what users can see.
- Language barriers. Most online literature is in English, or just one language, and machine translation is very weak.
- Handicap access barriers. Most web sites are not yet as accessible to handicapped users as they should be.
- Connectivity barriers. The digital divide keeps billions of people, including millions of serious scholars, offline.

There is empirical evidence that awareness of open access journals is very low among the major stakeholders including lecturers, researchers, librarians and students in Nigeria (Christian, 2008; Ivwighreghweta, 2012) Effective advocacy and promotion is critical for the successful implementation of the open access movement. Especially, academics accustomed to the well established routines of publication in academic journals of known prestige, with effective systems of peer review and dissemination, see little benefit in alternative methods of access to the same material (Cullen, 2009).

According to UNESCO (2002), desktops and Lap-top computers are still very expensive in Nigeria such that more than 85% of students are unable to acquire one for their academic utilization. There are still large percentages of students who are still unable to purchase computers for use. Currently new computers are as from #150,000.00 upwards.

Developed countries are taking initiatives to solve some of the problems. For example, the One Laptop per Child (OLPC) initiative is to provide school-age children of developing countries one connected laptop to assist in learning for those children who have limited or no access to education (Christian, 2008).

**RESEARCH METHODS**

Survey research design was used for the study. Data collected was done using structured questionnaire titled “Problems mitigating against the effective usage of open access questionnaire.” The population of the study consists of library and information science students at the University of Calabar. A total of 206 copies of questionnaire were administered and 200 were duly completed and returned. The data collected were analyzed and presented in tables using descriptive statistics.

**ANALYSES AND DISCUSSION OF FINDINGS**

Table 1 shows that a total of 206 questionnaires were distributed to the respondents and 200 copies were successfully retrieved indicating a high response rate. From table 2, the distribution of the respondents according to gender shows that there are 96 (48%) male while 104 (52%) were female students. This shows that female students are more in numbers in this study.
Table 1: Distribution of respondents by universities and students in social sciences

<table>
<thead>
<tr>
<th>Universities</th>
<th>No of questionnaires distributed</th>
<th>No of questionnaires distributed</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Calabar</td>
<td>206</td>
<td>200</td>
</tr>
</tbody>
</table>

Table 2: Gender of respondents

<table>
<thead>
<tr>
<th>Gender</th>
<th>No of respondents</th>
<th>percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>96</td>
<td>48</td>
</tr>
<tr>
<td>Female</td>
<td>104</td>
<td>52</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 3.

<table>
<thead>
<tr>
<th>Problems militating against open access journal usage</th>
<th>Agree (A)</th>
<th>Strongly agree (SA)</th>
<th>Disagree (D)</th>
<th>Strongly disagree (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low bandwidth</td>
<td>120(60%)</td>
<td>30(15%)</td>
<td>40(20%)</td>
<td>10(5%)</td>
</tr>
<tr>
<td>Electricity interruption</td>
<td>150(75%)</td>
<td>24(12%)</td>
<td>8(4%)</td>
<td>18(9%)</td>
</tr>
<tr>
<td>Inadequate funding</td>
<td>80(40%)</td>
<td>40(20%)</td>
<td>65(32%)</td>
<td>15(7%)</td>
</tr>
<tr>
<td>Unreliable Internet connectivity</td>
<td>73(36%)</td>
<td>62(31%)</td>
<td>45(23%)</td>
<td>18(9%)</td>
</tr>
<tr>
<td>Inadequate/lack of expertise</td>
<td>131(65%)</td>
<td>20(10%)</td>
<td>31(16%)</td>
<td>18(9%)</td>
</tr>
<tr>
<td>Inadequate advocacy</td>
<td>132(66%)</td>
<td>43(21%)</td>
<td>15(7%)</td>
<td>10(5%)</td>
</tr>
<tr>
<td>Equipment breakdown</td>
<td>59(29%)</td>
<td>57(28%)</td>
<td>62(31%)</td>
<td>22(11%)</td>
</tr>
<tr>
<td>Maintenance problem</td>
<td>32(16%)</td>
<td>120(60%)</td>
<td>26(13%)</td>
<td>22(11%)</td>
</tr>
<tr>
<td>Inadequate knowledge on the existence of open access journals</td>
<td>155(77%)</td>
<td>12(6%)</td>
<td>20(10%)</td>
<td>13(7%)</td>
</tr>
<tr>
<td>Inadequate computers</td>
<td>154(76%)</td>
<td>41(20%)</td>
<td>5(2%)</td>
<td>-</td>
</tr>
<tr>
<td>Long-term preservation of open access materials is not guaranteed</td>
<td>41(20%)</td>
<td>64(32%)</td>
<td>50(25%)</td>
<td>45(22%)</td>
</tr>
<tr>
<td>Open access journals are of low quality as compared to subscribed ones</td>
<td>28(%)</td>
<td>-</td>
<td>140(%)</td>
<td>32(%)</td>
</tr>
<tr>
<td>Difficulty reading computer screens</td>
<td>121(61%)</td>
<td>50(25%)</td>
<td>18(9%)</td>
<td>11(5%)</td>
</tr>
<tr>
<td>Inadequate internet skills to access open access journals</td>
<td>148(74%)</td>
<td>23(11%)</td>
<td>20(10%)</td>
<td>9(4%)</td>
</tr>
</tbody>
</table>

Research question 1

What are the problems militating against the usage of open access journals by LIS students in the University of Calabar?

Table 3 shows that in the University of Calabar, LIS students agreed that the problems enumerated on the table are encountered in their usage of open access journals. Inadequate computers (154 or 41) as reported by the LIS students was the major problem encountered followed by inadequate advocacy (132 or 43) followed by others. This report supports UNESCO (2002) which states that desktops and Lap-top computers are still very expensive in Nigeria such that more than 85% of students are unable to acquire one for their academic utilization. There are still large percentages of students who are still unable to purchase computers for use. Currently new computers are as from #150,000.00 upwards.

RECOMMENDATIONS

- More computer and computer terminals or work station, awareness programmes, adequate funding, expertise, infrastructure, electricity and high bandwidth were highly recommended

REFERENCES


