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## **An Empirical Study of Accessibility and Use of Library Resources by Undergraduates in a Nigerian State University of Technology**

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### **Introduction**

The primary purpose of university libraries is to support teaching, learning, and research in ways consistent with, and supportive of, the institution's mission and goals. In addition, library resources and services should be sufficient in quality, depth, diversity, and currency to support the institution's curriculum. As a result of this, university libraries are often considered the most important resource center of an academic institution. However, university education in Nigeria is facing a critical challenge in meeting new demands of the 21st century, with its ever increasing population growth, inadequate library facilities, resources and insufficient funding. Adequate library resources and services, at the appropriate level for degrees offered should be made available to support the intellectual, cultural, and technical development of students enrolled in Nigerian universities.

The growth of research in all fields of human endeavor is becoming increasingly detailed and sophisticated, faculty members and students have realized that the library has great roles to play in the provision of information necessary for their day to day research. Moreover, the library acts as a medium of getting the latest scientific and technological information either in print or electronic form. University libraries collect a variety of materials for preservation and use of the library patrons. These resources include not only traditional print-on-paper media like books, journals, newspapers, and maps, but also audiovisual materials like records, audiocassettes, video cassettes and projectors. Libraries maintain collections that include not only printed materials but also art reproductions, maps, photographs, microfiches, CD-ROMs, computer software, online databases, Internet, electronic books and e-journals and other media. In addition to maintaining collections within library buildings, libraries often feature telecommunications links that provide users with access to information at remote sites (Halsey, 2006). The library resources mentioned earlier cannot be used without adequate provision of these resources which should be made accessible to library users.

UNESCO as quoted in IFLA publication (1979) defined the library as any organized collection of printed books and periodicals of any other graphic and audio visual materials and the services of the staff to provide the facilitate the such materials as are required to meet the information, research educational or recreational needs of its user. Library resources found in developed countries support teaching and learning functions by facilitating research and scholarship of students and lecturers but this is not the situation in most developing countries because the libraries are struggling to survive due to financial constraints. Accessing Nigerian libraries against UNESCO 1979 definition could be unexplainable to

some minds but some of our libraries do not have adequate books, periodicals and audio visuals been acquired into the libraries not to talk of a 2007 definition of UNESCO which may include electronic/digital resources. The question then is “how many academic libraries in Nigeria fits into this definition of a library as defined by UNESCO?” “Can Nigerian university libraries boast of adequate collection of books, periodicals and electronic resources to meet with the needs of library users?” “Can Nigerian university libraries meet the information, research, educational and recreational needs of Nigerian students and researchers? These are pertinent questions that need to be answered in order to know the current state of library resources in Nigeria. Although university libraries in Nigeria are in a better shape in terms of resources (both printed and electronic) compared to public libraries. However, librarians in Nigeria are hard working people putting in place libraries that users would access and use despite the few resources placed at their disposal. These problems could be minimized when library administrators are more vigorous in lobbying university administrators to see the importance of the library and to release more funds. However, there is little empirical data about how electronic/digital resources are being used by Nigerian undergraduates bearing in mind that most universities in Nigeria have not fully digitized their library resources.

## Literature Review

The university library is the academic heart of the university system and its basic purpose is to provide university staff, students, and other researchers with materials assistances and an enabling environment that would facilitate teaching, learning and research. It is important for library services to focus more on the use of resources provided for their patrons. According to Whitmire (2002) academic library resources are considered a good measure of an institution's excellence and quality. Popoola (2008) affirmed that the information resources and services available in institutional information systems must be capable of supporting research activities among the students and faculty members. Iyoro (2004) in his study identified accessibility as one of the pre-requisites of information use. Ugah (2008) opined that the more accessible information sources are, the more likely they are to be used and readers tend to use information sources that require the least effort to access.

The areas where libraries can improve access and use of library resources to library users includes improved academic liaison in combining library and information technology support, open access IT area with personal or helpline supports from IT staff. Over the past decade, most libraries in Nigeria have been experiencing much difficulty providing materials to the users on account of the alarming rate of inflation of the prices of books and journals as well as depreciation value of the Nigerian economy (Ehikhamenor, 1993). Ugah (2008) quoted Osundina (1974), who studied the relationship between accessibility and library use by undergraduates in Nigeria and noted that the problem of Nigerian students is not the question of wanting to use the college library, but whether or not the university library can provide for their needs, and whether there is access to what is provided. This assertion was agreed to in later studies by Iyoro (2004) and Popoola (2008). In separate studies, Seth and Parida (2006), Ugwu (2008), Nnadozie and Nnadozie (2008) cautioned that availability of information resources and services does not automatically translate to information accessibility and use. Ugwu (2008) explained further in his study that the problems of transmission, storage, and display of information have been combined with the problem of getting information to users quickly. Although online searching and electronic bibliographic databases are now available in almost every field which confirms that as information expands, the ability of the user to process it remains fixed (Seth and Parida 2006). Many university libraries in Nigeria have not been able to acquire collections comprehensive enough to meet the needs of their users due to inadequate funding of the universities. The 10% of allocations meant for the library as stipulated by the National University Commission (NUC) has not been adhered to in many Nigerian universities. Popoola (2008) submits that the inability of university libraries to meet the information requirements of some library users might have forced them to use personal collections when conducting research.

Library resources as used in this context are collections of all text and bibliographic information sources; it also includes information technology such as those that support browsing, authoring and communication like computer and the Internet. In order for libraries to have a great impact of their

services on their users, it is necessary for each library management to aim at managing the library accurately and by providing timely information for all library users. This can be achieved by acquiring both relevant library resources in electronic and book materials through donations from organizations and alumni.

## **Background on LAUTECH Library**

Ladoke Akintola University (LAUTECH), Ogbomosho Nigeria came into being in 1990 as the 32<sup>nd</sup> university in Nigeria. The University of Technology is a state owned university, jointly owned by Oyo and Osun state governments. It opened its doors on October 29<sup>th</sup> to the first batch of students' numbering about 300. The academic programme of LAUTECH was woven around four faculties and a college. These included faculties of Agricultural sciences, Engineering and Technology, Environmental Sciences, Pure and Applied Sciences and College of Health Sciences. The university library was therefore established to acquire resources (books and journals) in line with the existing departments and curriculum of the university. Currently the library has a monographic collection of 30,000 volumes and subscribes to about 53 local journals.

## **Objectives of the Study**

1. To investigate the accessibility and use of library resources by undergraduates.
2. To investigate perceptions of LAUTECH undergraduates to the library resources.
3. To examine the level of satisfaction of LAUTECH undergraduates when using library resources.
4. To identify sources of information of the library resources.

## **Methodology**

### **Selection of population**

The population of this survey research included LAUTECH undergraduate students from 200 level–500 level who use library resources. The information used for the study was obtained from the daily/monthly statistics generated in the library over a period of one year. This showed that a minimum of 5,720 (i.e. 286 students per day) uses the library per month while 1430 uses the library per week during off-peak period (before examination period).

### **Research Instrument**

The instrument used for the study was a structured questionnaire divided into two parts. Part one dealt with the bio-data of the students which included the age, sex, level and the departments of the respondents. While section two included items eliciting information on library resources. Twenty-one (21) item close ended questions were designed to be answered by the respondents.

### **Sampling**

The sampling design used for the study was the simple random sampling technique where every library user has an equal chance of being selected as a member of the sample. A total of 600 respondents were chosen to represent the minimum number of students that visits the library on monthly bases (that is a minimum of 5720 per month and 286 per day). While distributing the questionnaire it was ensured that none of the respondents was given a questionnaire twice. To achieve this, the questionnaire

was randomly distributed to library users by using an identification number for each library user during the survey period.

### **Data Collection**

The data was collected by distributing the questionnaire randomly to undergraduate students that used LAUTECH library. The data was collected within a period of four weeks. A total of 600 questionnaires were distributed and a total of 479 were returned but 393 questionnaires were properly filled and could be analyzed giving a response rate of 65.5%.

### **Analysis of Data**

Descriptive statistics was employed to analysis the data using the Statistical Package for Social Sciences (SPSS). The analysis included the use of frequencies, table, bar charts and percentages.

### **Findings and Discussion**

Demographic information on the respondents revealed that 248 (63.1%) respondents were male undergraduates while 145 (36.9%) respondent were female. Their age group ranges from 16-25 years that is 283 (72%) respondents were 21-25 years and 87 (22.1%) respondents were from 16-20 years. The respondents' were asked to indicate if they had access to the use of computers. The result of the study showed that 63.1% of the respondents had access to computer while 36.9% respondents indicated that they did not have access to computer.

### **Use of Library Resources**

The respondents' were asked to indicate the reasons for using the university library. As shown in Fig. 1 below the study showed that 302 (76.8%) respondents used the library as a place where they can read and study. The study also revealed that 31 (7.9%) used the library for research, 17 (4.3%) used the library whenever they want to borrow books while 29 (7.4%) and 7 (1.8%) sleep and socialize in the library respectively. The result of the study also showed that 7 (1.8%) of the respondents used the library for entertainment and leisure. The result indicated that Nigerian students see the library as a place where serious academic work could be done. None of the respondents indicated that they use the available electronic resource which is CDROM search this may be because this facility has not been opened for the use of undergraduates. All library users can not share the same reasons for using a library. Tsafe (2004) studied students' use of Usmanu Danfodiyo University Library and found that the respondents also visited the library for more than one reason. According to Halsey (2006), young people may go to the library to study, to use computer workstations, or to socialize with friends. He also added that they may also use the libraries to gain access to recreational materials, conduct research during the initial phases of forming a new business and unemployed people may use the collections to find information about job opportunities. From the responses noted in a study by Weber and Flatley (2008) it was obvious that the students saw the library as an important place for studying, meetings, and group projects while most students did not use the library for personal research interests or leisure activities.

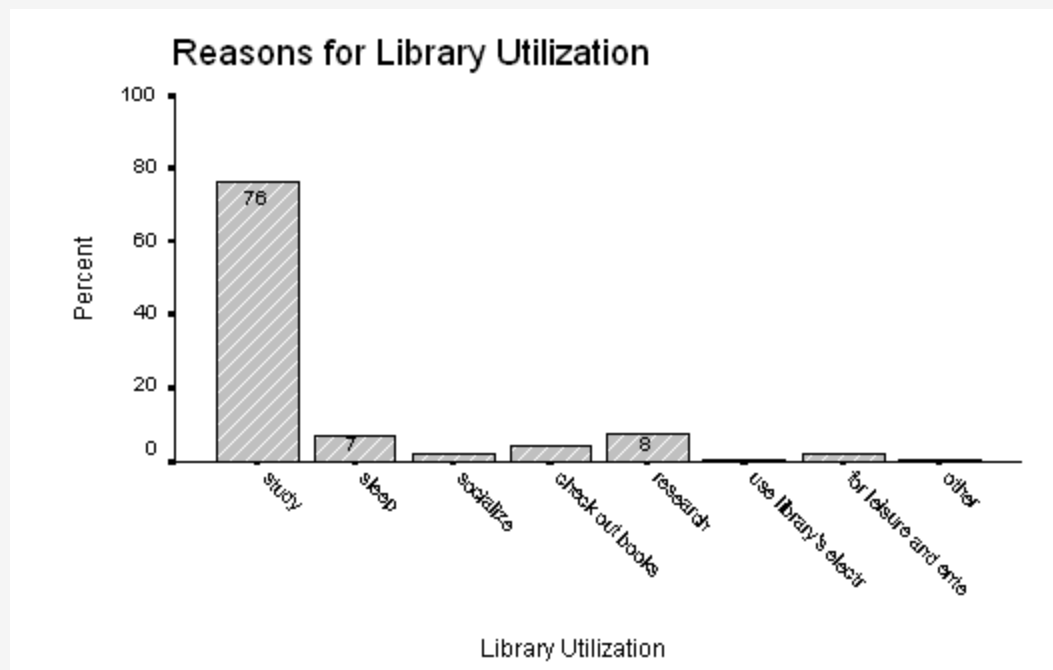


Fig. 1: Library use by undergraduates

This study revealed that the respondents found library resources relevant for academic pursuits of undergraduates accessible. Out of 393 respondents, 82.9% agreed that they found the library resources accessible for their academic pursuits while 17.1% disagreed. This revealed that LAUTECH undergraduates found the available library resources accessible and this had played a remarkable role their academic performance. This confirms the submission by Guine (1992) quoted by Ajayi and Adetayo (2005) that the library is a seat for revolution within the city because that is where received ideas are questioned, especially when they are fundamental, because it is a place of liberty and open-mindedness which gives the society the ability to adapt in the long or medium term.

### Information Search

The respondents were asked to indicate how they got informed about library resources as seen in Table 1 below, the result of the study indicated that 137 (34.9%) respondents engaged in personal search of the library resources. 83 (21.1%) were informed through the reference services available in the library, 69 (17.6%) through their lecturers, 51 (13%) through library use instruction course offered in their first year and 43 (10.9%) through friends. This result differ from a study carried out by OCLC (2005) in Australia, Canada, India, Singapore, the United Kingdom (U.K.) and the United States where 61% respondents identified friends as their top choice in identifying electronic resources/information resources while less than 15% of respondents indicated that they discovered electronic resources/information resources from librarians or teachers. Friends may not be able to inform others on available library resources in Nigeria because only few among them may have the information necessary.

Table 1: Search for library resources

N=393

| Variables                         | Frequency | Percent |
|-----------------------------------|-----------|---------|
| a. Search made by myself          | 137       | 34.9    |
| b. Reference services             | 83        | 21.1    |
| c. Lecturers                      | 69        | 17.6    |
| d. Library use instruction course | 51        | 13.0    |
| e. Friends                        | 43        | 10.9    |
| f. Library Websites               | 8         | 2.0     |
| g. Workshops                      | 1         | .3      |

The sources of information used by LAUTECH undergraduates indicated that 297 (75.6%) of the undergraduate students searched for information in books and journals while 79 (20.1%) searched for information through the Internet. The result of the study also indicated that 5 (1.3%) respondents consulted electronic books, 7 (1.8%) electronic journals and 3 (.8%) databases. This result implied that books and journals were more consulted source of information by students compared to electronic resources. In addition, apart from the CD ROMs other electronic sources (electronic books, electronic journals, Internet) were not available in the library at as the time of the study.

### Perception of Internet and Library Resources

The perception of the undergraduates on library resources in LAUTECH library was accessed using a five point Likert Scale question which was used to elicit information from the respondents (table 2). The Likert scale was classified as Strongly Agreed (SA), Agreed (A), Undecided (UD), Disagree (D), and Strongly Disagree (SD). This was measured using the scale 1-5 with 1 representing disagree and 5 strongly agree. The result from the study revealed that the respondents indicated that the library has enhanced their studies ( $\bar{x} = 4.19$ ). The results also revealed that the library resources did satisfy their research needs ( $\bar{x} = 4.18$ ) and that the library is important for their academic work ( $\bar{x} = 4.07$ ). The respondents also indicated that they visit the library because of available resources ( $\bar{x} = 3.81$ ). The implication of these results was that the respondents appreciate the role of the library in their studies and the perception of the respondents on LAUTECH library was high as shown in Table 2. This agrees to what Tsafe (2004) reported in his study where most of the respondents regarded the library facilities as very important in relation to their studies.

Table 2: Perception of library resources

N=393

| Variables  | SA   | A    | UD   | D   | SD  | Mean | Std. Deviation |
|--|------|------|------|-----|-----|------|----------------|
| a. library role has enhanced my studies              | 52.7 | 34.7 | 9.9  | .2  | .4  | 4.19 | 1.345          |
| b. library satisfy research needs                    | 37.8 | 53.0 | 7.1  | -   | 1.1 | 4.18 | 1.242          |
| c. finds library resources important for my work     | 40.7 | 41.2 | 9.5  | 1.9 | .2  | 4.07 | 1.278          |
| d. visits the library because of available resources | 40.0 | 41.0 | 18.0 | -   | .9  | 3.81 | 1.605          |

This study investigated the frequency of use of the undergraduates to both the library and the Internet (table 3), the results indicated that the 148 (37%) respondents used the Internet monthly while



102 (26%) respondents indicated that they used the Internet twice monthly. 124 (31.6%) respondents used the Internet weekly while 43 (10.94%) respondents indicated daily use of the Internet. The study also showed that most of the respondents visit the library on daily basis 203 (51.7%) compared with the number that visits the Internet on daily basis. Though the respondents agreed earlier in the study that they found information more accessible on the Internet most of them could not afford to pay the exorbitant rate collected at commercial centers in order to use the Internet daily hence more they make do with use of the library. This does not tally with the OCLC (2005) study conducted in five countries where 65% of college students used their college/university library at least monthly, with 14% using it daily. In LAUTECH undergraduate students use the library more on a daily (51%) and weekly (32.8%) basis. Chiemeka et. al (2007) in their study found out that the Internet enjoyed more patronage for the purpose of research because the users visited the Internet more often than academic library facilities for research purposes. OCLC (2005) confirms that the library is not the first or only stop for many information seekers. By 2002 at the University of Maryland, more faculty members used electronic journals daily or weekly than they did print journals (Dillon and Hahn 2002). This corresponds to the decrease in physical visits to the library by graduate students and faculty, especially in health sciences, science, and engineering (Hiller 2002).

Table 3: Frequency of use of Library and Internet by Undergraduates

N=393

| Variables        | Internet use |        | Library use |       |
|------------------|--------------|--------|-------------|-------|
| 1.Monthly        | 148          | 37%    | 14          | 3.6%  |
| 2. Twice monthly | 102          | 26%    | 34          | 8.7%  |
| 3.Weekly         | 124          | 31.6%  | 129         | 32.8% |
| 4. Daily         | 43           | 10.94% | 203         | 51.7% |

The respondents were asked to indicate if there were differences between the availability of information found through the Internet and the library for their academic work, 349 (88.8%) respondents indicated that more information was available on the Internet while 44 (11.2%) disagreed. The respondents were asked to explain further, and some of the responses of the respondents that agreed included the following:

“Internet provides up to date information than the library resources”

“Information retrieval is faster on the Internet”

“There are various sources to consult on the Internet”

“I feel more comfortable and confident while consulting the Internet than when am in the library because other students might have borrowed what I came to the library to look for”

Some of the respondents that disagreed gave the following reasons:

“I do not have to queue up in the cyber café before doing my assignments”

“The server may be down when you need the Internet most”

“Do not have to pay anytime I visit the library”



According to Agaba (2005) the shift from printed forms of information resources to electronic information materials should lead to better quality and efficient and effective research if used by academic staff and students. This study corroborates earlier findings by Weber and Flatley (2008) who found in their study that most students go to the Internet first when doing research. According to them, this is not a bad thing instead it is an opportunity to continually market and offer the library's services and resources through channels that are familiar to students.

The respondents were also asked to indicate their perception on the accessibility of information necessary for their academic pursuit on the Internet. The result showed that 313 (79.7%) respondents agreed strongly that they found information more accessible on the Internet while 80 (20.4%) disagreed about the accessibility of information on the Internet. The result indicated that information is more accessible on the Internet for undergraduate students except in few cases where the users need to pay certain amount to access information. According to OCLC 2005 study which revealed that libraries were seen as been more trustworthy/credible and as providing more accurate information than electronic resources while electronic resources were seen as been more reliable, cost-effective, easy to use, convenient and fast.

The respondents were asked to indicate the IT facilities that were available and accessible in the library, the results indicated that 94.4% respondents found the photocopy machine accessible for use while all the respondents indicated that electronic databases, OPAC, Close Circuit TV (CCTV), e-journal, microfilm and facsimile were not accessible for use. 3 (0.8%) respondents indicated that they have access to CD-ROM in the library. The university library has not been able to acquire the electronic resources mentioned above (as at the time of the study) because of financial constraints. Moreover funds were not really available in state universities libraries in Nigeria compared to what obtains in federal universities libraries funded by the Nigerian federal government where organizations like the Carnegie Corporation and Mac Arthur Foundation come to their assistance. In addition the respondents were asked to indicate the library resources that was mostly used among the existing ones in LAUTECH library, these were measured using a Likert Scale classified into Highly used (HU), used (U) and Not used (NU) and rated as 5, 3, and 1 respectively. The results revealed that books 54.8% ( $\chi = 2.48$ ), reprographic services 52.2% ( $\chi = 2.42$ ), reference services 44.3% ( $\chi = 2.33$ ), journals 40.4% ( $\chi = 2.31$ ) and newspapers 40.1% ( $\chi = 2.25$ ) were highly used as library resources. Selective Dissemination of information (SDI) 19.8% ( $\chi = 1.99$ ) was the least consulted library resources. This finding agrees with what was reported by Pelzer and Leysen (1988) quoted by Tsafe (2004), that the library was most frequently used for studying and for photocopying of materials. Tsafe (2004) in his study also discovered that borrowing of library books was the highest reason for using the library while other reasons included reading personal books, photocopy and newspaper reading was the least.

Table 4: Library Resources used by LAUTECH Undergraduate Students

N=393

| Library resources                         | HU   | U    | NU   | Mean | Std. Deviation |
|---|------|------|------|------|----------------|
| 1. Reference Services                     | 44.3 | 44.9 | 10.8 | 2.33 | .653           |
| 2. Journal/Magazine                       | 40.4 | 50.1 | 9.5  | 2.31 | .635           |
| 3. Newspapers                             | 40.1 | 44.9 | 15.1 | 2.25 | .699           |
| 4. Reprographic service                   | 2.2  | 8.2  | 0.6  | .42  | .675           |
| 5. Selective Dissemination of Information | 19.8 | 59.0 | 21.0 | 1.99 | .639           |
| 6. Books                                  | 54.8 | 38.8 | 6.4  | 2.48 | .615           |

## Conclusion and Recommendations

Libraries in Nigerian universities should regularly evaluate the quality, adequacy, and use of their library's information resources and services in order to meet up with the quality of library services stipulated by IFLA which was the aim of this study. According to Ajayi and Adetayo (2005), if Nigeria is to advance and the young people are to grasp the opportunities now open to them, they must be given access to books, periodicals, technical data and opinion, which will bring them into contact with cultural, scientific, technical and social ideas. Library resources when adequately provided and used would produce great critical thinkers and well taught graduates in Nigerian universities. The findings indicated that most Nigerian undergraduates view libraries as places to borrow books and read lecture notes but they were unaware of the rich content they can access through libraries when these resources are available. Even though library users may make limited use of library resources, they continue to trust libraries as reliable source of information for their academic pursuits. Though the use of electronic resources like the Internet is gaining wide recognition among Nigerian undergraduates, printed library resources has an important position in the academic environment.

Nigerian university administrators and decision-makers should use the results of the evaluations based on the use of the library resources to improve the effectiveness of these resources. This could be done by providing enough funding for the universities libraries so that both digital resources and library resources are provided for the use of undergraduates, postgraduates and faculty members. Most libraries in Nigeria continue to use manual library systems using print-on-paper resources when the world is changing from manual systems to digital system. For example the Internet has no physical shape or boundaries like a printed resource, it is not static but constantly grows, and the speed of these changes can be instantaneous. This facility should be made available in all Nigerian universities where all levels of students and faculty members would know current researches going on their fields and also contribute by having their own websites which would enable them to post current researches and update such information regularly. The library has a very important role to play in education and each educational institution should have a library with adequate funds, infrastructure, collections, and technology (Seth and Parida 2006). Although, electronic resources no matter how convenient cannot replace the function of the library in an academic environment. This explains why African universities should try their best in making their libraries equipped so that adequate and timely materials would be provided for the academic community and the library would still be able to maintain the number of library patrons despite the advent of the Internet.

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