PLASU Journal of Library, Archival & Information Science Vol. 3, No. 1, October 2025 Published by Department of Library and Information Science, Faculty of Social Sciences, Plateau State University, Bokkos, Nigeria ISSN: 1116-042X

ACCESS TO AND USE OF ELECTRONIC INFORMATION RESOURCES AMONG UNDERGRADUATES IN UNIVERSITIES IN PLATEAU STATE, NIGERIA

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Abstract
The university library is the cardinal component of the university in the conservation of recorded knowledge. Proper fulfillment of this role provides a sound basis for the transmission and advancement of knowledge. Therefore, the focus of this study was to explore access to and use of electronic information resources among undergraduates in universities in Plateau State. It examined the types, reasons, extent, satisfaction and challenges of the subject of investigation. The study was anchored on the Technology Acceptance Model. Survey design was employed. The two Universities sampled are the University of Jos and Plateau State University Bokkos. The respondents were 300 level students in the Faculty of Social Sciences in both universities. A sample size of 574 population was drawn from the two universities and simple random sampling technique was used. This study used a questionnaire as its research instrument for the collection of data. The data collected was analysed using descriptive and inferential statistics. The findings revealed that there was access to, and use of electronic information resources by undergraduates in these universities. The findings also indicated that more students needed to make use of EIRs for research activities, recreation and others. The study recommended among others that library personnel should be adequately trained more on the use of electronic information resources in order to assist students in need of information, solve their information needs.
Keywords: Use, Electronic, Access, Information, Undergraduates.

Introduction

Universities as institutions for knowledge generation have been central to the development of humanity. They have contributed to the development of new ideas, skills, technology and expertise which have facilitated human development. Therefore, universities as institutions need centres of creative undertakings, innovation and inventions which will impart skills pertinent to all those who qualify for enrolment. Currently, universities play a significant role in building up a country's capacity for a mutually beneficial engagement in an increasingly knowledge-based global economic environment. Since universities are relevant in national development, access to and use of information is very important for undergraduates' development as well. Therefore, to help move the nation forward, academic libraries should make sure that access to and use of electronic information resources is encouraged and practiced among undergraduates in universities.

Literature has shown that undergraduate students constitute the majority of users of electronic

services in university libraries and cyber cafes (Olaiya, Akintobi & Omatola, 2024; Anyim, 2021). Electronic information resources are resources which require computer access or any electronic product that deliver a collection of data, be it text referring to full-text databases, electronic journals, image collections, other multi-media products and numerical, graphical or time based as a commercially available title that have been published with an aim to be marketed (Reitz, 2004 cited in Okorie, 2020). Electronic Information Resources, therefore, refers to documents in digital formats which are made available to library users through a computer- based information retrieval system.

The Internet is the right and most extensively used channel to acquire the electronic information resources through different search engines (for example, Google, Alta Vista, Bing, Yahoo, and so forth) Web, OPAC and, of course, some offline databases in CD-DVD formats that can even be accessed without the help of the Internet (Olaiya, Akintobi & Omatola, 2024). Availability of electronic information resources in the library is not just enough, users must know about their existence to be able to use them effectively. In addition, users must also possess requisite skills that will enable them to exploit these resources and services. The resources might be available in the libraries, but they could be inaccessible to those who need them for different reasons (mis-shelved or un-catalogued). Libraries are encouraged to embark on training on the use of electronic information resources as a way to stimulate students' learning activities. It will also give access to the right information to the right seekers.

Johnson et al. (2012) in Afzal et al. (2023) refer to access as applied delivery, instructions, methods with e-resources, ensuring that the proper technology, software, hardware, and Internet connections, as well as providing user instruction on how to use these materials effectively. Delivery of electronic information resources can appear in a variety of formats such as Hyper-Text, Mark-up Language (HTML), Portable Display Format (PDF) documents, as well as through various download or Inter-Library Loan (ILL) means. Methods of access vary considerably from in-library connections, proxy servers, link servers, and virtual access to materials ensuring that users are able to make use of electronic information which they are entitled to. Access to electronic information resources provides users with a variety of information resources that are available. There should be various tools and education on how to access electronic information resources.

Anyim (2021) contends that the use and application of e-resources right from the onset refers to page views to abstracts, full-text and search engines pages. Afzal et al. (2023) further corroborate that 'use' is the frequency of resource access made by users. Use is identified as an activity which measures the work of an item to a library or information system. It is the single criterion which could be used to determine the reason for retaining or discarding a document in the collection of a library. It is essential in guiding the collection development efforts of a library. The use of a library can be obtained from the demand of its resources and services. Thus, whenever users have no demand for the resources and services of a library it means that the library does not have what they want to achieve through it. Therefore, the concern of this study is to examine access to and use of electronic information resources among undergraduates in universities in Plateau State, Nigeria.

Statement of the Problem

The university library is the cardinal component of the university in the conservation of recorded knowledge. Proper fulfillment of this role provides a sound basis for the transmission and advancement of knowledge. A university library is a house of knowledge that stores various information materials, which supports the academic programs of the universities through the provision of relevant reading materials. More so, libraries in universities in Plateau State have transformed from the traditional print-based repository of information resources into digital

and virtual libraries so as to provide electronic information services that will further consolidate their position as knowledge bases. Electronic information resources (e-resources) such as e-journals, e-books, e-databases, web resources, e-serials are now easily accessible from remote areas. Students do not have to physically visit the library to access the library's collection.

The Nigerian Library Association (NLA) in its National Conference and Annual General Meeting (2014) came up with the theme "Bring Back our Users," arguably to come up with methods and incentives to attract users to libraries. Studies have been conducted to find solutions to the issue of low patronage and use of electronic information resources by library user (Uwandu, 2022; Spyjeldnaes & Karlsen, 2024; Aldaz et al., 2022).These efforts have helped in showcasing the causes of this low patronage of electronic information resources as lack of awareness, power outages and slow networks among other factors. Even as this study has recommended training of users in the use of these electronic information resources, awareness campaigns to make users know what electronic information resources a Library has, the issues of low patronage and non-use of electronic information resources by library users still persists (Mohammed, 2017). A study by Uwandu (2022), recommends the training of students in the use of electronic information resources and provision of electronic information resources with a view to ensuring continues usage and availability in libraries.

However, even with this transformation of library worldwide, low patronage and use of its resources have marred this remarkable achievement. In this regard, observations have shown that undergraduate students in universities in Plateau State do not seem to be using the available electronic information resource which presents a problem to be investigated. Thus, this study investigates the access to and use of EIRs in libraries of two universities in Plateau State.

To increase the usage of electronic information resources of libraries by undergraduates in universities in Plateau State, therefore, there is the need to find out the types of electronic information resources undergraduate students use in order to serve them better. Also, the need to understand the challenges undergraduates face in accessing and using EIRs with the sole aim of making improvements towards achieving ease of use and access to EIRs.

Objective of the Study

The main objective of the study was to access to and use of electronic information resources among undergraduates in universities in Plateau State, Nigeria. The specific objectives of the study were to:

1. To find out the types of electronic information resources available in universities in Plateau State;
2. Examine how the electronic information resources are accessed by undergraduate students in the universities;
3. Explore the extent to which electronic information resources is utilised by undergraduate students in the universities;
4. Assess the reasons and extent of satisfaction derived from the use of EIRs by the respondents; and
5. Find out the challenges faced by the respondents as it relates to access and uses of electronic information resources.

Review of Literature

Types of Electronic Information Resources Available in Academic Libraries

Electronic information resources are these online materials which require computer access or any electronic product that deliver a collection of data, be it text referring to full-text databases, electronic journals, image collections, other multi-media (audio/visual) products and numerical (statistical) graphical or time-based as a commercially available title that have been published with an aim to be marketed. They include Email, Online Publication Access Catalogue (OPAC), CDROM, Electronic books, Full text Databases, Internet, E-journals.

According to Spjeldnaes and Karlsen (2024), e-books are texts in digital form, or books converted into digital form, or digital reading material, or a book in a computer file format, or an electronic file of words and images displayed on a desktop, note-book computer, or portable device, or formatted for display on dedicated e-book readers. Bidilica (2024) explains that the term e-book suggests actual content, that is, books that are available in electronic form, and which can be downloaded from the internet and read on a variety of hardware platforms with the aid of reading software.

Further, Compact Disc-Read Only Memory (CD-ROM) Databases are other types of electronic information resources. A CD-ROM is an e-resource format that contains up to 650-900 Mega-Bytes (MB) of information on a single-sided, single-layer optical disc (Terrell, 2023). It is a CD that can be read by a computer with an optical drive. The 'ROM' part of the term means the data on the disc is 'read-only', or cannot be altered or erased. Because of this feature and their large capacity, CD-ROMs are a great media format for retail software. CD-ROMs share the same technology as audio CDs, but they are formatted differently, allowing them to store many types of data (Terrell, 2023).

Others are Online Public Access Catalogues (OPACs), Electronic Mail (e-mail), which uses technology to communicate a digital message over the Internet. It types include Gmail, Hotmail, Webmail, Yahoo, Outlook and many others (Bitagi, 2016). There is also the Internet and its subsidiaries such as Facebook, X, WHtasApp, TikTok, Myspace, among others (Duarte, 2025). Internet is the most facilitating and the most powerful tool in promoting access to and use of e-resources. Makori (2015) argues that the Internet provides an excellent opportunity for undergraduate and postgraduate students to benefit from online communities for publishing theses and dissertations, leading to the creation and dissemination of knowledge.

Accessibility and challenges to Electronic Information Resources and Services in Institutions of Higher Learning: An Empirical Review

Several studies have been conducted in line with access and challenges to electronic information resources and services in academic institutions. To begin with, Olaiya, Akintobi, and Omatola (2024) conducted a study on Internet service quality and use of electronic information resources by postgraduate students in public universities in Osun State, Nigeria. The study established that electronic databases, like ProQuest, AGORA and HINARI were extensively used by the students. Finding also indicated that the students used institutional repositories at 67%, e-journals 51% while e-books were the less used. The study's finding further revealed concerns related to speed, functionality, accessibility, reliability of the university internet service.

Edem and Egbe (2016) conducted a study on availability and utilisation of electronic resources by postgraduate students in the University of Calabar (UNICAL) Library. Descriptive survey method was adopted in the study. The study sample comprised 276 respondents. Quantitative data was collected from using the respondent using structured questionnaire. The finding of the study showed that e-journal was mostly used among the postgraduate student. The frequency of use of EIR revealed that majority of the respondents often made use of the electronic.

In another similar study by Odunlade (2017) investigated the availability and accessibility of information resources, it was found out that more than half (58.8%) of the information resources were rated 50% and above in their accessibility level. These include textbooks and journals (mean = 2.89), abstracts and indexes (mean = 2.61), newspapers and magazines (mean = 3.22), computer (mean = 3.33), internet/WWW (mean = 2.89), encyclopedia (mean = 2.83), technical reports and manuals (mean = 2.50). Other electronic resources such as the online databases (mean = 2.02), CD-ROM databases (mean = 2.02), and audio-visuals

(mean = 1.93) theses and dissertations (mean = 2.35), conference proceedings (mean = 2.41) were below average in their accessibility ratings.

Subsequently, Adeniran and Onuoha (2018) conducted a study on use of electronic resources in private university libraries. The study adopted the survey research design. The study population comprised 285 postgraduate students. Quantitative method was used in obtaining data from respondent. It revealed in the study that the respondents use online databases for searching Information. They used electronic journals for research. The frequency of use of EIR reveals that CD-ROM was not frequently used by the respondents.

Aldaz et al. (2020) conducted a study on the use of EIR in libraries of the college of engineering in Universities in Delhi. The researchers adopted survey research design with a study sample of 900 respondents. Data was collected using questionnaire. Findings of the study revealed that the purpose of EIR use varies and that most of the respondents use EIR for the purpose of study and research. Other purposes of use reported are for the purpose of improving knowledge and for finding quick information. It was also reported that none of the respondents indicated career development as one of the purposes of EIR use. The extent of the usage also varies as majority of the respondents use it most of the time and a significant number of them compliment e-resources with print resources. Only a very few of them use printed materials most of the time.

Odunlade (2017) revealed in a study that every access to information resources would increase teaching effectiveness by 0.48 or 48%. This finding shows that there exists a high relationship between availability of information resources and its level of accessibility. However, the linear combination of information resources availability and accessibility significantly correlates with the teaching effectiveness of the respondents. By implication, if a resource is available but not accessible for use, teaching effectiveness may not be attained. Therefore, accessibility is found to be central to information resources utilisation in relation to Polytechnic lecturers teaching effectiveness.

Abubakar and Adetimirin (2015) explored how computer literacy predisposes postgraduate students to use e-resources. Survey research design and multi-stage sampling technique were used to select 2726 postgraduate students from 16 Nigerian universities. Questionnaire and computer tests were used to collect data and data was analysed using percentages and Pearson's product moment correlation. The postgraduates' computer literacy level was average (56.3%). They used only few of the e-resources in their libraries and the frequency of usage was low (weighted average X = 2.45). The study further reveals that computer literacy is a factor for effective utilization of EIRs but had positive relationship which is very strong and significant with postgraduates' usage of e-resources, ($r = .740$; $df = 2284$; $p < .05$). This shows that the more the postgraduates are exposed to computer literacy skills, the better the use of e-resources for Research Activities.

Daramola (2016) also investigated the various challenges which include number of computers at the e-resources center which were not commensurate with the number of students in the universities. 77.8% indicated technical problems as challenges. It is a fact that some of the computers at the e-resources section of the library are not utilised due to technical problems. 75% of the students mentioned poor orientation of students as a major challenge, while 69.4% stated that poor internet connectivity is a challenge to the use of e-resources in the library of Federal University of Technology, Akure (FUTA). About 35% of the students indicated poor personnel relation as a major challenge in utilising e-resources in FUTA library. It could be affirmed that there were several challenges faced by the students' utilization of e-resources. These range from insufficient number of computers, technical problems to inadequate orientation of

the students. Others include poor internet connectivity, lack of technical know-how on the part of the staff and poor personnel relation. The findings of Abolarinwa, Adewoyin, and Aderanti (2015) revealed poor internet signal/slow server 50.0% (76) and inadequate provision of full internet connectivity 33.3% (51) as the major problems encountered by the respondents.
In a study by Sanni and Adebayo (2018), it was found that the quality of internet service affects the usage of electronic resources by postgraduate students. The study revealed that students experienced difficulty accessing electronic resources due to slow internet speeds, poor connectivity, and limited bandwidth. These issues reduced the students' interest in using electronic resources and hindered their ability to conduct research effectively.

In a study by Al-Qaysi and Al-Fedaghi (2021), it was found that poor internet connectivity affects the access to these support services, which can make it more challenging for students to use electronic resources effectively. This can impact the quality of their work, including the accuracy and completeness of their citations and references.

Theoretical Framework

The study was anchored on the Technology Acceptance Model (TAM). The Technology Acceptance Model (TAM) was developed by Davis in 1989 to explain and understand factors affecting the acceptance and use of computer technology or ICT infrastructure in general in institutions). Basically, the Technology Acceptance Model (TAM) has been used by many researchers to explain and understand an individual's acceptance and intention to use variety of information and communication technologies (Shroff, Deneen & Ng, 2011). The TAM postulates that behavioural intention determines the actual use of information and communication technology. However, behavioural intention is jointly determined by two variables- Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) (Teo, Ursavas & Bahcekapili, 2011). Thus, the TAM presupposes that perceived usefulness and perceived ease of use influence attitude toward behavioural intention to use information and communication technology facilities such as the Electronic Information Resources.

The TAM proves that the use of ICT in institutions by undergraduates to be voluntary. According to Davis (1993), attitude towards the behaviour, use of information and communication technology, is a major factor that determines whether a potential user would actually use ICT or not. Therefore, attitude towards EIRs usage affects actual use of ICT, with perceived usefulness (PU) and perceived ease of use (PEOU) as the determinants of attitude. This is consistent with the postulation by Davis (1993) that "attitude toward using is in turn a function of two beliefs: perceived usefulness and perceived ease of use". In guiding this study, an EIR must be free of effort and have benefit in enhancing academic activities which will determine utilisation. Perceived Usefulness (PU) is defined as "the degree to which a person believes that using a particular system would enhance his or her job performance" (Davis, 1989). In other words, if the system of Electronic Information Resources has a high degree of usefulness to academic activities, it would be used by the potential user, who are the undergraduate students. Consequently, from the concept of perceived usefulness, it is therefore believed that undergraduate students would readily use a variety of electronic information resources in their academic and research activities, if they believe that this would increase their productivity and research output.

Perceived Ease of Use (PEOU) is "the degree to which a person believes that using a particular system would be free from effort" (Davis, 1989). So, Perceived Ease of Use deals with the situation in which little effort is required in EIRs usage by undergraduate students. However, in the context of Electronic Information Resources, TAM assumes undergraduate students will

formulate a positive attitude towards a particular technology when they perceive that the technology is useful and easy to use.

The Technology Acceptance Model (TAM) presents the constructs that influence undergraduate students' attitudes towards use of, or otherwise of a particular Electronic Information Resources which include: perceived usefulness and perceived ease-of-use. As such, this theory is applied in this study in determining which EIRs are free from efforts and are useful in enhancing the academic activities of undergraduate students. In the opinion of Shomoye, Adelakun and Adebisi (2023), the understanding of undergraduate students of the benefit of using e-resources and digital technology and how user- friendly they are will make them develop interest in it and subsequently through constant usage turn to use them without efforts. Moreso, to guide this study, by using TAM, it is proposed that Perceived Ease of Use (PEOU) construct of the TAM (Access to, and Types of EIRs) will make the academic activities of undergraduate students easier while the Perceived Usefulness (PU) variable will motivate them to utilise the EIRs (Use of EIRs). The assumption of this theory is that undergraduate students who access the different types of EIRs and use them frequently are expected to be more productive than those who do not.

Methodology

The survey design was used. Survey design was considered ideal for the study because the work was mainly interested in describing certain variables in relation to the population. This view is supported by Creswell (2009) who describe survey as that which gathers data from members of a population with respect to one or more variables and study samples from which inferences about populations can be drawn.

The population of this study comprised the 300 Level students Social Sciences faculties of the two universities. Information obtained from the records departments of the two universities indicated that the population of Social Science students in University of Jos was 1, 518. That of Plateau State University, Bokkos was 1, 275. Therefore, the total population was 2, 793.

Further, the sampling technique adopted was simple random sampling technique. The random sampling technique gives each member of the population an equal chance of being selected (Denga & Ali, 2002) based on a chosen criterion. The researcher used simple random sampling with proportional allocation to each university in accordance with the instrument used and in proportion with the total population of the study. This technique is to ensure an equal chance of including all the respondents. The research used the Advisor Table (2006) cite appropriately to include year for determination of sample size and got a sample size of 574. The researcher employed the structured questionnaire for data collection. The data generated through the questionnaire was analysed using quantitative data analysis. This involves the use of descriptive statistical analysis through SPSS software version (2.0) using tables to show the response rate. The descriptive statistics is used for the study with percentages and frequencies.

Data Presentation

Out of the 574 copies of the questionnaire administered to the respondents, a total of 479(83%) copies were retrieved and adequately completed and found usable for this study.

Table 1: Questionnaire Response Rate

Respondents	Number of Questionnaire Administered	The Number of Valid Questionnaire Retrieved	Percentage (%)

University of Jos	378	322	67.2
Plateau State University	196	157	32.8
Total	574	479	100

Table: 2: Types of the Electronic Information Resources Accessed by Undergraduate in the Universities

Electronic Information Resources accessed and utilized by students	Response	Percentage (%)
University wi-fi	109	22.8%
Personal Modem	217	45.3%
Use of cyber cafes	94	19.6 %
E- Library	32	6.7%
Others	27	5.6%
Total	479	100 %

It could be deduced from data in Table 2 that personal modem is the most used type of electronic information resources by the students to satisfy their information needs.

Table: 3: Respondents' Utilisation of EIRS

Extent of ERI Utilisation in Universities in Plateau State	V. high %	High %	Moderate %	Very low %	Low %	Total %
OPAC	7.4%	11.0%	316.5%	28.3%	36.8%	100%
E-Journals	210.4%	17.8%	33.8%	15.9%	22.1	100%
E-Books	25.9%	141.0%	18.2%	6.7%	8.4%	100%
Search Engines	3.8%	12.2%	25.7%	22.1%	36.2%	100%
Data base	9.1%	16.1%	4.6%	18.4%	51.8%	100%
websites	31.6%	39.2%	9.9%	4.8%	14.6%	100%
E-mails	14.0%	12.4%	12.1%	29.3%	32.2%	100%
CD-ROMS	3.1%	8.3%	17.0%	29.4%	42.2%	100%
Reference data base	12.2%	20.4%	34.1%	22.3%	11.0%	100%
Institutional. Repositories IRs	6.2%	8.4%	11.4%	42.4%	31.6%	100%

The data in Table suggest that electronic resources have become important to students. This is due to their speed, ease of use, ability to search multiple files at the same time, ability to save, print and repeat searches, more frequently, updating all contribute to the high utilisation of EIR's by undergraduates.

Table: 4: Reason for Utilisation of Electronic Information Resources in the Universities

S/N	Reason for usage	Frequency (%)
1	Communication	43(9.0%)
2	Recreation	42(8.8%)
3	Research activities	158(33.0%)
3	Support Learning	28(5.8%)
4	Assignments	183(38.2%)
5	Others	25(5.2%)

This could be inferred that the respondents mostly use electronic information resources more for assignments, and less of it, for other activities. EIRs provide resources to enable them undertake assignments given.

Table 5: Extent of Satisfaction

S/N	Extent of satisfaction	Frequency/Percentage (%)
1	Highly satisfied	51 (6.9%)
2	Fairly satisfied	59 (9.5%)
3	Undecided	76 (19 %)
3	Highly dissatisfied	136 (29.7%)
4	Dissatisfied	147(34.9%)

The finding is an indication that the libraries are not fully equipped to meet the needs of the users.

Table 6: Challenges Associated with Access to EIRs

			Band width	Vendor Upgrades	Inadequate Computers	Load Shedding	Of Camp. Access Problems	Personal (Staff) Attitude	Limited Period Allocation	Lack Of Subscribed	Internet Charges	Others	
Access to EIR	Low	Count	0	1	1	2	4	1	0	0	0	0	9
		Utilization	0.0%	11.1%	11.1%	22.2%	44.4%	11.1%	0.0%	0.0%	0.0%	0.0%	100.0%
	Very Low	Count	0	1	5	3	18	6	0	3	8	0	44
		Utilization	0.0%	2.3%	11.4%	6.8%	40.9%	13.6%	0.0%	6.8%	18.2%	0.0%	100.0%
	Moderately	Count	2	5	18	5	42	9	14	6	18	2	121
		Utilization	1.7%	4.1%	14.9%	4.1%	34.7%	7.4%	11.6%	5.0%	14.9%	1.7%	100.0%
	HIGH	Count	5	6	27	24	77	31	16	17	43	6	252
		Utilization	2.0%	2.4%	10.7%	9.5%	30.6%	12.3%	6.3%	6.7%	17.1%	2.4%	100.0%
	Very High	Count	2	1	7	6	14	5	4	5	6	1	52
		Utilization	3.8%	1.9%	13.5%	11.5%	26.9%	9.6%	7.7%	9.6%	11.5%	1.9%	100.0%
Total		Count	9	14	58	40	155	52	34	31	75	9	478
		Utilization	1.9%	2.9%	12.1%	8.4%	32.4%	10.9%	7.1%	6.5%	15.7%	1.9%	100.0%

The challenges to the use of electronic information resources as presented constitute the major constraints to the use of electronic information resources by undergraduate students in universities in Plateau State. The discussed challenges, explains why students do not have access to, and use electronic information resources effectively, for their academic activities.

Discussion of Findings

The study reveals that the electronic information resources available in universities in Plateau State include OPAC, e- journals, e-books, e-mails, search engines, data bases, websites, CD-ROMs and others to enable students access and use them for communication, recreation, research activities, sports, learning, assignments and other purposes. This finding is in tandem with that of Spjeldnaes and Karlsen (2024), who listed the types of electronic resources to be found in academic libraries as CD-ROM, database, e-book and e-journal. Terrell, 2023) listed the available EIRs in Nigerian university libraries to be Online Public Access Catalogue (OPAC), CD-ROM, databases, electronic mail (e-mail) and Internet browsing. The report identified the information services provided by tertiary institution libraries. The information services include loan of books, current awareness,

selective dissemination of information (SDI), photocopying, bibliography compilation, internet facilities, indexing and abstracting, and binding of documents among others.

The findings of the study further indicated that the larger part of the respondents accessed electronic information resources through universities' Wi-Fi, some used personal modem, and a very few of the respondents indicated the use of cyber cafes to access electronic information resources. The findings show that almost all the types of EIRs were available to satisfy the information needs of the undergraduate students.

In addition, the analysis reveals the extent of utilising EIRs in the universities by respondents as very high with e-journal, e-book, search engines, databases, websites, e-mails, CD-ROMs, reference database, institutional repositories. This shows that many respondents utilised e-books and e-journals for their electronic information resources more, while others are very low.

Undergraduate students use electronic information resources provided by university libraries in Plateau State, more for assignment, followed by research activities and communication, recreation, support learning and other purposes. This indicates that the respondents mostly used electronic information resources more for assignments and less of it for other activities.

Most of the undergraduate students in the universities in Plateau State were not satisfied with the electronic information resources that were provided by their libraries. Ikolo (2015) who examined users' satisfaction with library services discovered that undergraduate students were not satisfied with reference services, electronic database services, CD- ROM services and indexing and abstracting services. It was also observed that library users were not satisfied with internet services, e- journals and the reference database. They were satisfied with load shedding hours of their lectures.

The study identified the challenges militating on the access to and use of electronic information resources amongst undergraduate students of universities in Plateau State. The factors are inadequate computers, load-shedding, off-campus access problems, personnel attitude, little period allocation, lack of subscribed online data bases and internet facilities.

The finding is consistent with the study of Khan and Bhatti (2012) who conducted a research on the departmental libraries of the University of Peshawar, Pakistan. Their study revealed that most of the departmental libraries' services were below standards. The major issues identified were lack of budget, inadequate information technology infrastructure, inadequate administrative parameters, and poor physical facilities. The librarian identified inadequate legal framework, insufficient funding, inadequate skillful manpower, technology dependence, nature of content, intellectual property right, hardware obsolescence, software obsolescence, fragility of storage devices and hard disk crashing.

Conclusion

It can be concluded that the 300 level students of Plateau State universities had access to and use electronic information resources which include OPAC, e- Journals, e-books, Search engines, data-bases, websites, CD-ROMs, reference databases and institutional repositories which are made available by the university. Moreover, electronic information resources provided in the libraries were above average, such as free Wi-Fi, e-library and others. But despite the fact that efforts had been made to meet the information needs of students, more needed to be done to meet schedules of students. Furthermore, conventional services such as selective dissemination of information, bibliography

compilation, indexing and abstracting services were completely not provided by the university libraries. The provision of Internet services was also inadequate, information services in university libraries is highly imperative if such libraries are to meet with the information needs of their students.

Also, the information resources were provided at a low speed. This action does not justify the resources devoted for library development in academic institutions. In another sense, it will discourage the management of the institutions from improving the budget to libraries, since available resources have been under-utilised. This is also reasons which have contributed to poor academic performance of students.

Funding in particular was found to be a major factor militating against the provision of information resource and information services. This challenge has adverse effect on the academic libraries, information resources collections and subsequently, the information services they offer. The researcher is of the view that funding is key while other factors militating against library development are all improved upon.

The researcher hopes that the suggestions of this study would be used by government, university authorities, librarians and relevant authorities to address the problems and formulate policies that will help libraries to function more effectively in meeting undergraduate students' information needs.

Recommendations

1. The current and adequate electronic information resources should be provided, and there is need for provision for internet facilities always.
2. Personnel should be subjected to in-services training often on attitude and skills required for the services of electronic information resources.
3. Students should be encouraged to access and use electronic information resources in the modern way of disseminating information such as selective dissemination of information (SDI), and current awareness services (CAS).
4. Alternative sources of power i.e. electricity generators and solar energy (power) should be provided for all academic libraries to enable constant access and use of the available electronic resources as well as availability of data, with strong bandwidth.

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