

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Library Philosophy and Practice (e-journal)

Libraries at University of Nebraska-Lincoln

October 2021

COLLECTION MANAGEMENT AND UTILIZATION OF ELECTRONIC RESOURCES BY POSTGRADUATE STUDENTS IN THE UNIVERSITY OF IBADAN, NIGERIA

Kazeem Adeshina
sekesi2009@gmail.com

Follow this and additional works at: <https://digitalcommons.unl.edu/libphilprac>



Part of the [Archival Science Commons](#), [Cataloging and Metadata Commons](#), [Collection Development and Management Commons](#), [Information Literacy Commons](#), [Scholarly Communication Commons](#), and the [Scholarly Publishing Commons](#)

Adeshina, Kazeem, "COLLECTION MANAGEMENT AND UTILIZATION OF ELECTRONIC RESOURCES BY POSTGRADUATE STUDENTS IN THE UNIVERSITY OF IBADAN, NIGERIA" (2021). *Library Philosophy and Practice (e-journal)*. 6317.

<https://digitalcommons.unl.edu/libphilprac/6317>

COLLECTION MANAGEMENT AND UTILIZATION OF E-RESOURCES BY POST GRADUATE STUDENT IN UNIVERSITY OF IBADAN, NIGERIA

Kazeem Adeshina

sekesi2009@gmail.com

The Polytechnic, Ibadan, Oyo State, Nigeria

Abstract

As the life cycle of information products has become increasingly digital from “cradle to grave,” the nature of electronic information management has dramatically changed. These changes have brought new strategies and methods as well as new issues and challenges. At the bottom line the services are increasingly delivered to a desktop from distributed publishers or information providers. Information organizations act either as primary information providers or as brokers between the user and the primary service provider. Hence, the study examines the collection management and utilization of e-resources by postgraduate students in University of Ibadan. Descriptive survey design was employed for this study and the study population consisted of 312 postgraduate students in University of Ibadan. Also, the study adopted both qualitative and quantitative methods for data collection. A multi-stage sampling technique was used to select the sample of the study from 3 faculties (Arts, Education and Science) using a sampling fraction of 10%. Questionnaire was the instruments used for data collection from respondents. The questionnaire was analysed using simple frequency for research questions while content analysis was used for analyzing the In-depth interview conducted. The result of the findings revealed that 100% of the respondent indicated that on monthly basis acquisition of e-resources was done through subscription, 85.3% stated that quarterly the University of Ibadan purchase e-resources while 56.1% of the respondents believe that on yearly basis the acquisition could be done through consortia while some of the respondents believe that on monthly basis, acquisition of e-resources is done through open internet sources. On the accessibility of e-resources, 56.1% stated that they accessed e-resources through the library dedicated computers while 70.5% strong agreed that they accessed e-resources in their library through their personal computers, on the same note, 64.1% stated that the university ICT centre has been their source of accessibility to e-resources in the university. On the frequency of acquiring e-resources, showed that majority 56.1% of the respondents of this study revealed that e-journal on weekly interval, while on the daily basis, 85.6% revealed that they use e-portal. In addition, 70.5% revealed that Online Public Access Catalogue (OPAC) is acquired monthly, Maps was acquired quarterly in the university library. In conclusion, the purpose for using e-resources in the university revealed that 56.1% agreed that e-resources were used for assignment, while 70.5% agreed that it was used for classwork, it was all agreed that e-resources is used as supplement for study notes, on the same note 70.8% strongly agreed that e-resources were used for project consultation, On the same vein, 80.8% strongly agreed that e-resources is used during Theses writing. It is however concluded that The University Library should increase bandwidth and online journal subscriptions, seeking more funds to do so. More bandwidth will also improve access time as the systems will work faster.

Subscriptions to print journals should be maintained. University of Ibadan should improve on the libraries budget in order to attain to the cost of electronic resources and for the training of staff that will handle the electronic collection development.

Introduction

Electronic resources have been defined by various authors and these definitions differ based on each authors background and disposition. E-resources are also defined as book content that is made available in an electronic format (Hawkins 2000). Hawkins (2000) outlines three true electronic publishing implementations of the e-book format to which can be added the dimension of proprietary and non-proprietary technology (Crawford 2000). Morgan (1999) limits the definition of e-resources, as opposed to e-texts, to being a hardware/software combination used to read electronic data on a specially designed portable device. According to Lynch and Terry (1999), this would simply be one type of viewing technology - with desktop PCs, notebooks and personal digital assistants (PDAs) being others. Balas (2000) focuses on the software needed to read the resources, pointing out that e-texts can be read on any computer system whereas e-resources require special reader software.

Although the idea of e-resources is not new there is still much confusion about e-resources, even at the level of the basic definition of what an e-resource is (Tedd, 2005). In the last few years, there have been emanating complexity in the definition of e-resources (Hughes, 2003). Various attempts have been made in the literature to define e-resources concerning four perspectives such as media, content/file format, device and delivery. JISC defined e-resources as an online version of printed books, accessed via the internet (Gold Leaf, 2003).

The definition provided by Armstrong et al. (2002) is any piece of electronic text regardless of size or composition (a digital object), but excluding journal publications, made available electronically (or optically) for any device (handheld or desk-bound) that includes a screen. In 2003, the International Encyclopedia of Information and Library Science updated its definition continuing to use the book-analogy approach, although this definition does not seem to be widely known. Moreover, the result of integrating classical book structure, or rather the familiar concept of a book, with features that can be provided within an electronic

environment is referred to as an electronic book (or e-resources), which is intended as an interactive document that can be composed and read on a computer (Landoni, 2003).

University libraries are indispensable agents for information gathering, organization and dissemination across the world. A university library is an academic institution that has always made information available to the academic community to support teaching, learning and research. In a study of Use of Library Resources and Services of Federal University of Technology, Akure, by postgraduate students, identified that print journals have the highest consultation (97%) followed by textbook/monographs (92%); theses and dissertations (86%), reference materials (75%), international organization publications (71%) while e-journals had (50%) followed only by conference/seminar papers (46%) and government publications (36%). In a study in the Federal University of Technology Owerri (FUTO) library provides access to internet services, EBSCO host, e-Granary, AGORA portal, and AGORA/TEEAL while the Niger Delta University library had 18 computers with internet connectivity, which the staff and students make free use of.

Furthermore, in a study in University on Calabar the frequency of usage of online databases by academic staff of the University of Calabar, Nigeria, for teaching and research was low, only occasionally and the databases most highly used are Science directory, EBSCO Host, AGORA and HINARI. Okello-Obura and Ikoja-Odongo (2010) reported that Makerere University subscribed to several full-text databases like Emerald, EBSCO host, AGORA, HINARI, OUP among others while their LIS students used Emerald and EBSCO host monthly even as 44% used HINARI and none using AGORA for their academic work. Lakan (2008) found that all the libraries and information centres at ABU, Zaria subscribed to various CD-ROM and online databases like CAB abstract, Medline, Vet CD, Beast CD, AGRICOLA, AGRIS, TEEAL, AJOL and Internet portals like AGORA and HINARI. The study also found that these resources were highly used by the staff of the agricultural complex at the university. Iwoga, (2007) found that the TEEAL, AGORA, HINARI and OARE now provide free or low-cost journals to developing countries to improve information access to science Scholarship-African librarians and researchers. Similarly, Salam and Aderibigbe (2010) found that 57.8% of the academic staff of the university indicated awareness whereas 33% used it when necessary.

The University of Ibadan is the first University in Nigeria formerly known as a College of the University of London. The University gave birth to the historic library known as the Ibadan University Library which was later renamed as Kenneth Dike Library (KDL). In recent time, and as part of the global shift from hardcopy information prints to electronic-based ones, the library is embarking on creating the platform for the creative commons or institutional repository of the University. The project entails the digitization and web hosting of Faculty staff and students' publications such as journal articles including technical publications, theses, as well as rare documents of national historical importance that are domiciled in the library.

The repository also planned to reflect several items such as memorabilia, artefacts, some official photographs of the University, including its flora and fauna. The library subscribed to several electronic databases consisting of journals, monographs, e-resources, videos, reports etc. Some of these electronic databases subscribed to are JSTOR, HINARI, EBSCOhost, OARESciences, LEXIS NEXIS, Jaypee Digital, Proquest, ebrary, INTECH. Science Direct, Emerald Insight, IMF-elibrary etc. The databases subscribed to are in two categories, namely: Local Area Network-based and Internet-based. Access to some of these databases are Internet Protocol (IP) address controlled, that is, the user must be on the University of Ibadan Network before access can be granted and at the same time do not need access combinations (i.e User ID and Password). Some are accessed, using access combinations and some are accessible through the Local Area Network of the library that is, the user needs to be physically present in the library before accessing the resources while others are on Open Access.

With regards to the automation of the library collections as a basis for the establishment of Online Public Access Catalogue (OPAC), computerization of collections commenced in the 80s and is still ongoing as a result of the innovations coupled with the need to keep pace with what the technology is dictating, year in year out. New software, VIRTUA has been deployed; individuals can access the library catalogue from the comfort of their offices, classrooms and homes as long as there is the availability of Internet connectivity. This, in essence, has made interoperability of information system possible whereby the resources in the library can be shared with other library users elsewhere in the global term. Users all over the world can access KDLOPAC.

Internet and email are more available and mostly used by postgraduate students. Even though CD-ROM, electronic journals and e-resources are relatively available at the University of Ibadan postgraduates' students' rate of use is low. Low level of usage of electronic resources, in particular, full texts databases can be linked to lack of search techniques skills by many postgraduate students of the university to access the myriad of e-resources. Effective use of electronic information resources by postgraduate students at the University of Ibadan is being hampered by several factors. The interrupted power supply was ranked highest among other factors like speed and capacity of computers, retrieval of records with high recall and low precision, retrieving records relevant to information need, lack of knowledge of search techniques to retrieve information effectively, non-possession of requisite IT skills and problems accessing the internet.

Evans (2000) defined library collection development as the process of meeting the information needs of the people (a service population) in a timely and economical manner using information resources locally held, aside from other organizations. The collections, grouped into print and non-print, include books (text, fiction and reference), audio and/or video including microforms and transparencies, all deployed by the library to satisfy the diverse information needs of the library users. These collections are built by the library through several methods like purchase, subscription, exchange, and donation/gift, based on an assessment of the information needs of the library users. E-resources and e-periodicals are now at the forefront of library collection development concern. Given the vast resources available on the Web, librarians need to approach it deliberately and scientifically to access the resources most relevant to the needs of their users.

Collection management is a broad term for collection development (CD) and collection building, including planning and funding, collection development, book selection, acquisitions, provision of access, use, organization, maintenance, evaluation, preservation and weeding of materials (Awoyemi, 2011). Collection management can also be conceived of as those activities traditionally associated with CD (from selection to acquisition); more all-embracing to include the systematic maintenance of library collections, covering resource allocation, technical processing, preservation and storage, weeding and discarding of stock and the monitoring and encouragement of collection use. Collection management is important because it leads to the provision of library resources for library patrons as the

quality and the various types of resources, selected and acquired in the library make for effective service delivery. This is why librarians are enjoined to be more interested in collection management as a fundamental responsibility. Challenges affecting collection management in Nigerian libraries include government attitude towards library development; inadequate and mismanagement funding and personnel; high foreign exchange; poor bibliographic control; underdevelopment of publishing industry and the book trade; problem of shipping/clearing; conservation and preservation issues.

Today, more than ever before, economic meltdown, decreasing library budget, rising global inflation and cost of publication, information explosion, limitless scholarly information needs and government economic policies, have all had tremendous effects on the book trade with more far-reaching implications for collection management in Nigeria, as elsewhere in the world, especially in the developing countries. Moreover, today's economic climate has necessitated demands that attention is paid to the varying needs of the library in formulating the criteria for selection and the method of acquisition of relevant library resources. Thus, effective book selection is now more imperative in libraries to match material acquisition with available funds while also making the collectors more cost-effective and balanced. This remained the one sure way out of the present exponential growth in publications in all disciplines.

The collection management of e-resources to support individual libraries' e-resources acquisitions within an interdependent collaborative framework to encourage each library to integrate e-resources, as appropriate, into their library acquisitions and reader support to ensure, as far as possible, that all e-resources acquired are available to all current staff and students from any location to encourage efficient e-resources purchasing, especially to avoid unnecessary duplication at the title level to ensure that all readers and librarians are kept informed of new e-resources availability

Statement of Problem

Libraries have transformed into digital and virtual libraries where resources, journals and magazines have changed into e-resources, e-journals, and e-magazines. This has increased the global dissemination of information. Electronic resources such as e-journals, e-databases, web resources, e-serials amongst others are easily accessible in remote areas.

With the incredible development of the Internet and electronic technology industry, the e-book has become a necessary part of college students' school life across the world today. Recently, universities and librarians have been increasing the number of electronic collections. E-resources are becoming essential components of university library collections. The University of Ibadan library (Kennett Dike Library) subscribed to many electronic databases consisting of journals, monographs, e-resources, videos, reports etc. Some of these electronic databases subscribed to are JSTOR, HINARI, EBSCOhost, OARESciences, LEXIS NEXIS, Jaypee Digital, Proquest, ebrary, INTECH. Science Direct, Emerald Insight, IMFelibrary etc and have kick-started digitization and web hosting of Faculty staff and students' publications such as journal articles including technical publications, theses, as well as rare documents of national historical importance that are domiciled in the library. University of Ibadan postgraduate students rate of use of electronic resources in the library has been questionable which has been linked to several factors which include Interrupted power supply, speed and capacity of computers, retrieval of records with high recall and low precision, retrieving records relevant to information need, lack of knowledge of search techniques to retrieve information effectively, non-possession of requisite IT skills and problems accessing the Internet. Hence there is a need for this study to investigate the collection management strategies of e-resources among postgraduate students in the University of Ibadan library.

Research Question

1. What are e-resources collection management strategies in the University of Ibadan Library? [Acquisition, organization and dissemination]
2. What is the frequency of acquisition of e-resources use among post-graduate students in University of Ibadan library?
3. What is the purpose of the use of e-resources among post-graduates in the university of Ibadan?
4. What are the users ascertain satisfaction with the use of e-resources among post-graduate students at the University of Ibadan?
5. What is the collection management of electronic resources in the University of Ibadan?

Empirical review

E-resources are the main ingredients that have become a necessity in most academic library resources today. Shuling (2007) reveals that electronic information has steadily become a key resource in every university library. The development of e-resources has rapidly transformed information access and management procedures in the academic environment and particularly in university libraries. Through the use of e-resources, students, researchers and other information seekers are now exposed to various accesses to electronic information resources globally. Moreover, in today's electronic environment, the role of the library has evolved to meet the demands of technology evolution. According to Dadzie (2007), the benefits of electronic resources are invaluable because they serve as research tools that complement the print-based resources in a traditional library setting. She outlined the benefits of e-resources as, access to information that might be limited to the user because of distance or finances, and access to more current information.

Amori (2013) opined that e-resources such as e-journal, e-book, CD ROM databases, online databases and web-based resources when effectively utilized constitute an important input in the information services in libraries. They help in providing relevant information required by students, which if properly utilised can help in improving reading culture and improve academic excellence. However, Iretefoju (2012) stated that the provision of e-resources in the right quantity has been regarded as a major input required for high information services provision.

The use of e-resources, a prevalent phenomenon in universities, is crucial as it enables the enhancement of academic work (Deng 2010). The need arises, therefore for postgraduate students, whose studies focus on the conduct of research, to maximise the use of e-resources in their studies. While some studies in Ghana (Borteye & Dadzie 2015; Kwadzo 2015), Nigeria (Akporhonor & Akpojotor 2016) and Uganda (Okello-Obura 2010), for example, have investigated e-resource utilisation among postgraduate students, e-resource research in postgraduate theological universities, including the very few ones in Ghana, appears to be inadequate. The Akrofi-Christaller Institute of Theology, Mission and Culture (ACI), Ghana's premier theological university with a charter to award only postgraduate degrees, provides staff and students with access to various e-resources (to aid teaching, research and

learning) through the Consortium of Academic and Research Libraries in Ghana (CARLIGH). The consortium enables member academic libraries to harness resources for the provision of adequate information to users (Dzandza & Alemna 2011:20).

Selection and acquisition of electronic resources in libraries have been a new phenomenon in the area of research among libraries. Researchers have widely written on the use of electronic resources and not the electronic resources selection and acquisition and possibly the challenges libraries face while selecting and acquiring electronic resources which are the core of this research. Selection of information resources is the core collection development function, and the primary objective of the selection decision for any format is fundamentally the same: satisfying users' needs. Cabonero and Mayrena (2012) see selection as the heart of collection development. Selection is a necessary first step in the acquisition process. Information materials are selected based on their perceived usefulness to a group of readers. This is because "the amount of satisfaction a reader finds in the library depends directly upon the materials the library has available for his use, observed Carter in Nwosu and Udo-Anyanwu (2015). With the advent of e-resources, job responsibilities of selectors have changed drastically. Selection of e-resources outside the guidance of a collection development policy leads to haphazard unfocused groupings of resources that may not support the mission of the library. In the past, selectors recommended new titles on an individual basis using traditional selection criteria such as quality, relevance, use, and cost observed, Welch (2002).

The library should also inform users about new content and services as well as potential temporary problems accessing electronic resources. To establish if an electronic resource is appropriate for the library's collection and to help determine the true and hidden cost implications of acquisition, storage, maintenance, preservation and other issues, detailed information regarding the item is required. Flatley and Prock (2009) offer a five-step process for collecting electronic (or "digital") material which includes a gathering of information contents, evaluation of information contents organization of information contents, construction of digital collections and maintenance of digital collections.

The most effective way to provide access to electronic books/journals in university libraries is through subscription to online databases which can be accessed through the internet. In an acquisition of e-resources, some libraries are only able to purchase through

consortia or purchase most of their electronic resources through consortia because of the available discounts. Some libraries request that consortia look at resources they are interested in, and others use consortia to save on items they would buy anyway. Consortia are also a way for libraries to learn about what electronic resources are available, observed Flatley and Prock (2009).

According to Bothmann and Holmberg (2010), " e-resources also include products that aid in resource access for patrons such as A-Z lists, Open URL, servers, Federated search engines and resources that provide full- text content such as publishers' electronic journal content, journal content platforms such as Project Muse or Jstor and content aggregators such as EBSCOHOST's Academic Search Premier and proxy servers or other authentication tools" (Bothmann and Holmberg, 2010)An e-resource can also be " a package of e-journals or a database of abstracts and indexes that include the full text of some or all articles referenced by the indexes" (Sadeh and Ellingsen, 2005). For e-resources, the interface through which it is offered should be considered because these elements are intricately linked, even though they can be licensed separately. In addition, among the e-journals package, published by a publisher, a specific journal could be governed by a different set of license terms (Sadeh and Ellingsen, 2005).

There are other definitions by Pinfield, (2001), Bothmann and Holmberg (2010) and Ballard & Lang, (2007). Details of these definitions can be found in the literature review. The avalanche of online resources was forcing the beginning of the change in the traditional library organization. Managing of the acquired digital resource created sets of challenges for libraries. The journey to the effective management of e-resources according to Parker (2007) started as a result of Digital Library Forum (DLF) held in Atlanta, Georgia, in April 2000 to review the shift needed to adjust from project to production perspective in digitizing efforts in libraries. This gave birth to the Digital Library Federation (DLF)-Electronic Resource Management Initiative (ERMI). There were developments of policies and practices and building of tools to help in the management of the over-whelming e-resources and the information therein as the structures of Library Management System (LMS) could not sustain it. "Adam Chandler of Cornell University developed a Web Hub for developing administrative metadata for electronic resource management for promoting sharing of what

different individuals and libraries were building in terms of tools to support electronic resource management." (Parker, 2007: 02.)

During the testing, the librarian pays considerable attention to the technical infrastructure requirement by the user interface such as documentation on issues related to a web browser and plug-in compatibility. Others are selection, acquisition, access decision to renew or cancel (Sadeh & Ellingsen, 2005). To place this paper in the right perspective necessitates providing the definition/ explanation of the management of electronic resources. According to Pinfield (2001), management of electronic resources demands expertise in handling systems which are more complex than library management systems. (LMS) It requires setting priorities on staff times, deciding how and who presides over the functionality of all things electronic, such as A-Z lists, federated search engines, e-journals, abstracting and indexing databases, dark archives, and ERMs (Electronic Resource Management Systems) It also involves providing the library users with convenient ways to find and access them and providing library staff with the tools to keep track of them. Bothmann and Holmberg (2010) extended the definition to include a focus on an approach to budget management, provision of administrative functions and tracking of license agreements. They also addressed electronic resource management from the perspectives of planning, policy and workflow issues experienced by libraries.

Ballard and Lang (2007) posited that effective management of electronic resources means getting the right information to the right people at the right time. Effective management requires planning. Planning starts with libraries developing a prioritized list of goals for electronic resources to guide their work Bothmann and Holmberg (2010) noted that creating a small electronic resources committee of key players in a library's electronic resource management work is the first step. The key players should come from various divisions of the library. The committee would then identify all of the staff involved in electronic resources workflow from administrative support personnel to administrators (Mi & Sullenger, 2006) They gave other aspects which the committee should consider as budgetary concerns such as creating a list of electronic resource types, such as A-Z lists, open URL, and full-text databases. The list may be used to prioritize what a library has, what it needs but is lacking and what it wants to have but is not essential for service to patrons.

Ballard and Lang (2007) pointed out that ERMs help libraries to keep track of their online subscriptions and license agreements. They will equally enable libraries to view all information related to a particular resource without having to consult multiple files and spreadsheets. They also facilitate the elimination of staff redundancy and duplication of efforts. Workflows can be examined more carefully and streamlined where necessary: cataloguing problems can be identified and corrected, and unlikely partnerships and alliances can be formed between departments within and outside the library. Some ERM systems such as Meridian developed by Ex Libris provides space to store additional information such as branding, Z39.50 access and availability of MARC records, open URL support, special hardware/software requirements, and the location and availability of training and user documentation (Ballard and Lang, 2007).

A study conducted Markwei (2001) identified low data transmission and information overload as the main limitations users encountered in accessing the internet. Eventually, these challenges may frustrate users and limit them to the needed information. Martey (2004) discovered that from 1996-2004, libraries adoption to ICT was slow. The results of the study attributed slow pace in the adoption of ICT to the high cost of ICT infrastructure and lack of technical expertise. This confirms research survey by Adika (2003) that, internet use in Ghana is still very low among university faculties. Most academic libraries in developing countries are battling with challenges to improve on internet access. The inability of academic libraries to provide timely information to enhance access and use of e-resources are due to inadequate provision of modern ICT infrastructure. Dadzie (2005) also revealed that access to e-resources is challenged by inadequate computers on campus. In support of this view, libraries are therefore charged to put in place adequate mechanisms to enable effective and efficient access and use of e-resources.

Methodology

The research design employed for this study is the descriptive survey design. The population of this study consists of postgraduates of the University of Ibadan, Ibadan. According to the data collected from Management Information System (M.I.S), University of Ibadan, there are thirteen (13) faculties offering postgraduates programmes within the

university with a population of thirteen thousand, one hundred and fifty-three (13,153) postgraduates' students.

Table 1 Study Population of postgraduates Students by Faculty in University of Ibadan

FACULTIES	U.I No. of Postgraduates
Agriculture	368
Agriculture and Forestry	1000
Arts	1695
Basic Medical Sciences	521
Clinical Sciences	1161
Dentistry	190
Education	1613
Law	707
Pharmacy	421
Public Health	142
Science	2098
Technology	1340
The Social Sciences	1452
Veterinary Medicine	445
TOTAL	13, 153

The multi stage sampling technique will be used for this study. In the first stage three faculties will be randomly selected with the use of the balloting method, these faculties will be selected in order to get a sample that will be representative of the population. The faculties are Science, Arts and Education. The second stage involved the purposive selection of similar departments from the faculties selected. At the last stage, a sampling fraction of 10% will be used to select the sample size for each of the departments. Singh (2006) states that in descriptive research, the sample population should be between 10-20%. This therefore gives a total of 312.

Table 2 Sample Size of the Study

Faculties	Departments	University of Ibadan	
		Population	Sample
Science	Chemistry	792	79
	Mathematics	384	38
Arts	Philosophy	529	52
	History	359	36
Education	LARIS	208	21
	G & C	464	47
Total		3127	312

The research collection instrument used is questionnaire and interview schedule. The questionnaire is in 6 sections: A, B, C, D, E, and F Section A collected information on demographic data of postgraduate students which include faculty, department, level of study, age gender and marital status with a total number of ten (10) questions. Section B to F contains information on collection management and utilization of e-resources using a self-designed instrument.

The researcher and two researcher assistants administered a total number of three hundred and twelve (312) designed copies of the questionnaire on the respondents in the selected departments. The questionnaire collected, coded and analyzed. The statistical package for the social sciences (SPSS) was used for the analysis. Descriptive statistics such as frequency and percentages was = to analyze the research questions.

Presentation of results

Table 3 Demographic characteristics of the Respondents

Demographic Characteristics		Frequency	Percentage
Faculty	Arts	101	32.4
	Science	121	38.8
	Education	90	28.8
Department	Philosophy	92	29.5
	History	9	2.9
	Chemistry	82	26.3
	Mathematics	39	23.5
	LARIS	45	14.4
	Guidance and Counselling	45	14.4
Level of Education	700 level	222	71.2
	800 level	90	28.8
Age	20 – 24 years	88	28.2
	25 – 29 years	90	28.8
	30 – 34 years	88	28.2
	35 – 39 years	46	14.7
Gender	Male	175	56.1
	Female	137	43.9
Marital Status	Single	180	57.7
	Married	132	42.3
Religion	Christianity	174	55.8
	Islam	138	44.2
Residence	On campus	222	71.2
	Off campus	90	28.8
	Total	312	100.0

Table 3 shows the distribution of the respondents by their demographic characteristics where 101 (32.4%) of the respondents were from Faculty of Arts, 121 (38.8%) were from Faculty of Science and 90 (28.8%) were from Faculty of Education. When asked about their department, 29.5% indicated their department as philosophy, 2.9% were from History department, 26.3% indicated Chemistry while 23.5% were from Mathematics department and 14.4% were from Library Archival and Information Studies and Department of Guidance and Counseling respectively.

On the level of their education, 71.2% of their respondents indicated 700 level as their level of education while 28.8% were in 800 level. Their age category is as follows; 28.2% of the respondents indicated their age category between 20 – 24 years, 28.8% were within the age range of 25 – 29 years, 28.2% also indicated 30 – 34 years and 14.7% were within the age range of 35 – 39 years. On the gender distribution, the table revealed that a large number of the respondents which is 56.1% were male while 43.9% were female. The information on the marital status distribution of the respondents revealed that 57.7% of the respondents were single and 42.3% were married. It was further revealed that 55.8% revealed Christianity as their religion while 44.2% indicated they practice Islam. In conclusion, information on the participant's residence area revealed that 71.2% of the respondents reside on campus while 28.8% reside off-campus. It can be inferred from the table that majority of the respondents of this study were from Faculty of Science, Philosophy department, masters level within the university as well as 25 – 29 years as their age range. Their gender as male, single by marital status who practices Christianity and resides on campus.

Research Question One:

What are e-resources collection management strategies in University of Ibadan Library?

[Acquisition, organization and dissemination]

E-resources Collection Management**Table 4a: Frequency of acquisition of e-resources in University of Ibadan**

		Monthly	Quarterly	Yearly	Never
1	Through Subscription	312 (100%)		-	-
2	Through Purchase	46 (14.7%)	266 (85.3%)		-
3	Through Consortia	91 (29.2%)	46 (14.7%)	175 (56.1%)	
4	Open internet sources	267 (85.6%)	45 (14.4%)	-	-

Table 4a shows the e-resources collection management where 100% of the respondent stated that the library subscribes to e-resources on monthly basis, 85.3% stated that quarterly, the University of Ibadan purchase e-resources while 56.1% of the respondents stated that the university acquires e-resources yearly through a consortium. Respondents stated that the library acquires e-resources through the open internet monthly.

Table 4b: E-resources Acquisition and availability of the listed e-resources in your Library

S/N	E-resources	VRA	RA	NRA	NA	Mean	Std. Dev.
1	E-journals	220 (70.5%)	46 (14.7%)		46 (14.7%)	3.58	1.06
2	E-books	175 (56.1%)	91 (29.1%)	23 (7.4%)	23 (7.4%)	3.73	1.04
3	E-databases	200 (64.1%)	20 (6.5%)	46 (14.7%)	46 (14.7%)	3.73	1.17
4	E-magazines	45 (14.4%)		175 (56.1%)	92 (29.5%)	3.15	.646
5	E-serials	220 (70.5%)			92 (29.5%)	3.58	.931
6	E-dissertations and theses	266 (85.3%)		46 (14.7%)		3.29	.710

7	E-reference materials (such as encyclopedia, indexes, abstract etc.)	220 (70.5%)	46 (14.7%)	23 (7.4%)	23 (7.4%)	3.44	.737
8	CD-ROMS	175 (56.1%)	137 (43.9%)			3.43	1.53
9	E-Images	175 (56.1%)	91 (29.2%)		46 (14.7%)	3.58	.734
10	Online Public Access Catalogues	200 (64.1%)	92 (29.5%)	20 (6.4%)		3.58	.913
11	E-audio visual resources	175 (56.1%)	91 (29.2%)	46 (14.7%)		3.58	.734
12	E-dailies (Newspapers, Magazines etc)	266 (85.3%)		46 (14.7%)		3.14	.355
	Weighted mean					3.48	

Note Key: **VRA: Very Readily Available, RA: Readily Available, NRA: Not Readily Available, NA: Not Available**

Table 4b shows the acquisition and availability of e-resources in the library where 70.5% revealed that E-journals is very readily available, 56.1% also stated that E-books are very readily available in the library, 64.1% of the respondents were also of the opinion that E-databases were very readily available. On the contrary, 56.1% of the respondents believe that E-magazine is not readily available in the library. E-serials is very readily available in the university library as revealed by 70.5%. Furthermore, 85.3% of the study respondents stated that E- dissertations and Theses are very readily available in the university library, 70.5% also concurred with the availability of E-references materials such as encyclopedia, indexes and abstract among others. In addition, 56.1% of the study respondents indicated that CD-ROMS are one of the e-resources that are very readily available, 56.1% indicated that E-images are very readily available in the university library where users could access. In conclusion, 64.1% of the respondents stated that Online Public Access Catalogues are very readily available to users in the university, also 56.1% indicated that E-audio visual resources are very readily available then 85.3% stated that E-dailies such as Newspapers, magazines among others are very readily available for use in the university library by users.

Table 4c: Frequency of accessing the e-resources in the library

		SA	A	D	SD	Mean	Std. Dev.
1	Through the library dedicated computers	91 (29.2%)	175 (56.1%)		46 (14.7%)	3.00	.940
2	Through my personal laptops	220 (70.5%)	92 (29.5%)			3.70	.456
3	Through the university ICT centre	200 (64.1%)	20 (6.5%)	46 (14.7%)	46 (14.7%)	3.73	1.17
4	Through my mobile devices (IPADS, Phones, Kindlefire etc)	267 (85.6%)	45 (14.4%)			3.14	.352
5	Through friends' devices	46 (14.7%)	46 (14.7%)	220 (70.5%)		3.56	.737
	Weighted mean					3.43	

Table 4c revealed the accessibility of e-resources in the library where 56.1% stated that they accessed e-resources through the library dedicated computers while 70.5% strongly agreed that they accessed e-resources in their library through their personal computers. On the same note, 64.1% stated that the university ICT centre has been their source of accessibility to e-resources in the university. Furthermore, 85.6% stated that mobile devices such as IPADS, Phones, Kindlefire among others were their means of accessing the e-resources in the university library. However, a large number of respondents disagreed that they accessed e-resources through their friend's devices.

Research Question Two

What is the frequency of acquisition of e-resources in the University of Ibadan library?

Table5: Frequency of Acquisition of E-Resources

		Daily	Weekly	Monthly	Quarterly	Yearly	Never	Mean	Std. Dev.
1	e-journal	91 (29.2%)	175 (56.1%)	-	-	-	46 (14.7%)	3.29	1.60
2	e-portal	267 (85.6%)	45 (14.4%)	-	-	-	-	3.14	.351
3	Online Public Access Catalogue (OPAC)	92 (29.5%)	-	220 (70.5%)	-	-	-	3.41	.913
4	Maps	137 (43.9%)	-	-	175 (56.1%)	-	-	2.68	1.49
5	HINARI	46 (14.7%)	91 (29.2%)	75 (24%)	100 (32.1%)	-	-	3.97	1.20
6	AGORA	45 (14.4%)	92 (29.5%)	175 (56.1%)	-	-	-	3.41	.730
7	EBSCOHOST	-	220 (70.5%)	46 (14.7%)	46 (14.7%)	-	-	3.00	.543
8	Science direct	222 (71.2%)	90 (28.8%)	-	-	-	-	3.28	.453
9	TEEAL	44 (14.1%)	93 (29.8%)	175 (56.1%)	-	-	-	3.42	.726
10	MIT Open source ware	92 (29.5%)	45 (14.4%)	-	175 (56.1%)	-	-	3.82	1.36
11	e-books	222 (71.2%)	90 (28.8%)	-	-	-	-	3.28	.453
12	Law reports	90 (28.8%)	-	42 (13.6%)	90 (28.8%)	90 (28.8%)	-	3.71	.453
13	OARE	93 (29.8%)	44 (14.1%)	-	175 (56.1%)	-	-	3.82	1.36
14	Personnel	175 (56.1%)	46 (14.7%)	91 (29.2%)	-	-	-	3.26	.884
	Weighted mean							3.16	

Table 5 shows the frequency of acquiring e-resources, where majority 56.1% of the respondents of this study revealed that e-journal on a weekly interval, while on the daily basis, 85.6% revealed that they use e-portal. In addition, 70.5% revealed that the Online Public Access Catalogue (OPAC) is acquired monthly, Maps were acquired quarterly in the university library. It was also revealed that on a quarterly basis, HINARI is acquired to the

university library while 56.1% revealed that AGORA as an e-resource is acquired monthly. EBSCOHOST, as revealed by 70.5% of the respondents, is acquired weekly unlike Science direct where 71.2% of the respondents revealed that it was acquired daily.

In addition, the table revealed that 56.1% of the study respondents reported that TEEAL is acquired to the university library monthly, on the same figure it was indicated that MIT Open source ware was acquired on quarterly ratio. While on a daily basis, 71.2% revealed that books are acquired daily in the university library. Furthermore, law reports were acquired as revealed by 28.8% of the respondents on a daily basis, quarterly and yearly basis. In conclusion, 56.1% stated that OARE is acquired quarterly in the university library and Personnel information on e-resources were acquired daily.

Research Question Three

What is the purpose of use of e-resources among post-graduates in University of Ibadan?

Table 6: Purpose of use of E-Resources

		SA	A	D	SD	Mean	Std. Dev.
1	For assignment	137 (43.9%)	175 (56.1%)			3.56	.497
2	Classwork	92 (29.5%)	220 (70.5%)			3.71	.456
3	supplement study notes	312 (100%)				3.00	.329
4	Project	221 (70.8%)	91 (29.2%)			3.29	.455
5	Thesis writing	252 (80.8%)	45 (14.4%)	13 (4.2%)	2 (0.6%)	3.25	.555
6	Term paper	92 (29.5%)	220 (70.5%)			3.70	.456
7	Seminar presentation	224 (71.8%)		88 (28.2%)		3.56	.901
8	Finding information in area of specialization	244 (78.2%)	40 (12.8%)	28 (9%)		3.37	.627
	Weighted mean					3.43	

Table 6 shows the purpose for using e-resources in the university where 56.1% agreed that e-resources were used for assignment, while 70.5% agreed that it was used for classwork, it was all agreed that e-resources are used as a supplement for study notes, on the same note

70.8% strongly agreed that e-resources were used for project consultation, in the same vein, 80.8% strongly agreed that e-resources are used during Theses writing. In addition, 70.5% agreed that e-resources are useful for Term Paper writing, also 71.8% strongly agreed that e-resources are used for seminar presentation while 78.2% indicated that e-resources are very useful when finding information in an area of specialization.

Research Question Four

What is the users' satisfaction with the use of e-resources among postgraduate students in University of Ibadan?

Table 7: Perception of Students on E-Resources

		SA	A	D	SD	Mean	Std. Dev.
1	The use of e-resources makes it very easy to learn	260 (83.3%)	40 (12.8%)	12 (3.9%)		3.00	.329
2	e-resources makes it easy for me to perform search task	267 (85.6%)	45 (14.4%)			3.14	.351
3	The use of e- resources makes it easier for readers to re-read information	200 (64.1%)	66 (21.2%)	46 (14.7%)		3.29	.710
4	Fewer errors encountered and easy to solve using e- resources	267 (85.6%)	45 (14.4%)			3.14	.351
5	There is more satisfaction after use of e- resources	279 (89.4%)		17 (5.4%)	16 (5.1%)	3.26	.783
6	E- resources are very readily available online always	194 (62.2%)	32 (10.3%)	16 (5.1%)	70 (22.4%)	3.18	1.24
7	Increase use of e-resources can ensure save environment through the less usage of papers from trees.	200 (64.1%)	33 (10.6%)	33 (10.6%)	46 (14.7%)	3.00	.346
8	E- resources can be enhanced with multimedia features	92 (29.5%)	22 (70.5%)			3.70	.457
9	E- resources do not require physical space	137 (43.9%)	175 (56.1%)			3.56	.497
10	The publishing process for e-resources is much shorter than for traditional books.	92 (29.5%)	45 (14.4%)	175 (56.1%)		3.26	.887
11	lack of experience of e- resources use and technophobia create barriers to e-resources use	91 (29.2%)	46 (14.7%)	100 (32.1%)	75 (24%)	3.27	.884
12	E- resources titles are limited and there is an unequal distribution of titles across subjects.	175 (56.1%)	92 (29.5%)	45 (14.4%)		3.84	.646

13	Users do not know about the existence of e- resources or their collections on the Internet or at the nearest libraries	46 (14.7%)	45 (14.4%)	175 (56.1%)	46 (14.7%)	3.71	.893
	Weighted mean					3.33	

Table 7 shows the perception of the respondents on e-resources where 83.3% strongly agreed that the use of e-resources makes it very easy to learn, also 85.6% strongly agreed that e-resources make it easy for them to perform a search task, 64.1% strongly agreed that the use of e-resources makes it easier for readers to re-read the information. It was also strongly agreed by 85.6% that fewer errors encountered and easy to solve using e-resources by its users on the same note, 89.4% also strongly agreed that there is more satisfaction after the use of e-resources. In addition, the availability of e-resources online makes it easy for the participant to use as revealed by 62.2%. In term of safety measures and prevention of environmental pollution, 64.1% of the respondents strongly agreed that an increase in the use of e-resources can ensure a safe environment through the less unsafe of papers from trees. Another advantage of using e-resources is that it has multimedia features that can enhance reading and its use.

Furthermore, it was agreed by 56.1% of the respondents that E-resources do not require physical space while on the contrary, 56.1% disagreed that the publishing process for e-resources is much shorter than for traditional books. On the same note, 32.1% disagreed that lack of experience of e-resources use and technophobia create barriers to e-resources use. On a different note, 56.1% strongly agreed that e-resources titles are limited and there is an unequal distribution of titles across subjects. While it was further disagreed by 56.1% of the study respondents that users do not know about the existence of e-resources or their collections on the Internet or at the nearest libraries.

Research Question Five

What is the collection management of electronic resources in the University of Ibadan?

In order to gather information on the collection management of electronic resources in the University of Ibadan, an interview was conducted using a key Informant from the university library.

Interview Question 1: What are the management strategies in place to manage the resources? E.g. storage, dissemination, backup, updating of software, hardware maintenances.

Response from the Key Informant is as follows:

“They are updated on a yearly basis, they pay subscription yearly, there are five databases in research. These include AGORA, HINARI, ARDI, GOLI and OARE. They are also in consortium with other institution like BOWEN University, Iwo, Federal Medical Centre Library, Abeokuta, because for you to get access to the databases, it is 1500 dollar in an institution because they went to other institution for consortium they reduce the money instead of 1500 dollars to 1000 dollar. On yearly basis instead of 4500 dollars they paid 3000 dollars for renewal of subscription”.

Interview Question 2: How are the e-resources disseminated to users?

Response from the Key Informant:

“They carry out information literacy program through library orientation, current awareness services, creating of awareness, they printout hardcopy and paste it on the notices board in faculties and they always mandate the faculties librarian to create awareness at the faculty level, from Kenneth Dike Library end the central library user come to the library and they assist the users to access the resources in the library and it is on their notice board. some of the lecturers and other students normally request for e-copy of the comprehensive place of their e-resources which it is normally sent to them, On Kenneth Dike Library site i.e University of Ibadan site they create a link there for the user to be able to have access to the database of interest, about e-resources in Kenneth Dike Library some have IP-Address

and it is regulated i.e University of Ibadan password is required before you can have access to it”.

“After logging in you can have access to it, the vendors requested for their IP address range which was given to them and configuration was done base on that, within the range the users will be comfortable using the Kenneth Dike Library network, you have to authenticate it before you can use it”.

Interview Question Three: Can I have access to usage statistics

Response from the Key Informant:

“The only way a user can have access to the usage statistics is when the user comes to the library, though it is free as long as the user has his\her proper registration during their first-year registration and they have their code to login, the users can come to the library to make use of the library sit down and do justice to whatsoever. you can have access to it but if a user wants to be registered to log in to the university of Ibadan network the user will have to pay a token amount of #100 but if you have your code the user can come in with his\her laptop, they pay per access combination and it is #5000 per month and they usually deduct it from university of Ibadan library account. A user can have access to it if he\she as the code to log-in”.

Interview Question Four: What are the weeding strategies of e-resources?

Response from the Key Informant:

“Kenneth Dike Library does not weed, for example, for the Department of History, the older the better, weeding e-resources looking at the usage statistics and they are not making use of the database, if there is no return of investment that is, the database is not been used there can be a return of investment, why is the database not been used, some of the database that is subject-specific though some of them the vendors tried to expand their area of coverage to co-operate other subject areas”.

Question Five: How often does the university library acquire e-resources in the library?

Response from the Key Informant:

“These depend on funding, money dictates the library e-resources. There are some databases to acquire that there is no money to get them”.

Discussion of Findings

On the e-resources collection management strategies in the university of Ibadan library (Acquisition, organization and dissemination). The findings of this study revealed that there are strategies put in place by the University of Ibadan Library for the collection of e-resources as well as the management in the library. Selection of e-resources is the core collection development function; whose primary objective of the selection decision is to fundamentally satisfy users' needs. This corroborates the findings of Cabonero and Mayrena (2012) that selection/acquisition is the heart of collection development followed by the organization of e-resources according to its needs. Selection is a necessary first step in the acquisition process.

On the frequency of acquisition of e-resources use among post-graduate students in the University of Ibadan, library shows that majority of the respondents indicated that on monthly basis acquisition of e-resources is done through subscription while some e-resources are purchased monthly and acquisition through consortia is done yearly. This implies that the university library to a large extent acquires e-resources through various means. This corroborates the findings of Flatley and Prock (2009) that the most effective way to provide access to electronic books/journals in university libraries is through subscription to online databases which can be accessed through the internet in the library. In an acquisition of e-resources, some libraries are only able to purchase through consortia or purchase most of their electronic resources through consortia because of the discounts that are available. Some libraries request that consortia look at resources they are interested in, and others use consortia to save on items they would buy anyway. Consortia are also a way for libraries to learn about what electronic resources are available. This is also in line with the findings of Madhusudhan (2010) stated that as the numbers of electronic journals grow every day, libraries are interested in subscribing to them considering their benefits over print media. Madhusudhan (2010) went further to indicate that there is a dramatic shift from print collections to electronic collections which is having an impact on library patrons and on library functions. Madhusudhan (2010) further discovered in his study that the University met the academic community's expectations since it had then expanded its library services to provide electronic resources through subscription which is done weekly.

On the purpose of use e-resources among post-graduates in the University of Ibadan. The finding of this study revealed that the purpose of using e-resources varies among respondents of this study ranging from the classwork to Theses/project writing. Term paper design while others use it for assignment. This corroborates the finding of Madhusudhan (2010) that “the purpose of use of e-resources is the most important and basic aspect related to the appraisal of the usefulness of e-resources”. In Madhusudhan (2010) efforts at finding out about the purpose of use of electronic resources, Madhusudhan (2010) discovered that 62 per cent of the respondents made use of electronic resources daily for assignment, 18 per cent occasionally for research work, and 16 per cent two or three times a week for a term paper, only 4 per cent used the e-resources once a week seminar presentation, and none of the respondents reported using e-resources once a month. The frequency of use of e-resources by research scholars depends on the nature of a library’s e-collections, organization, maintenance and services. It was also revealed at the time of the study that the availability of scholarly e-journals (intranet only) was free. That gave the respondents the latest up-to-date literature in their relevant fields, hence the main reason for the daily use of e-resources by research scholars. It also corroborates the findings of Amusa and Atinmo, (2016) that many users are aware of e-resources in the Library. This direct link suggests that awareness facilitates utilisation. Despite the numerous shreds of evidence on the high utilisation of e-resources resulting from user awareness of such resources in the Library for research purpose and Theses writing, some other studies reported contradictory findings.

On the ascertaining of users satisfied with the use of e-resources among post-graduate student in the University of Ibadan. The findings of this study revealed that the use of e-resources makes it very easy to learn for learners because it contains some multimedia that enhance usage. This corroborates the finding of Shuling’s 2007 study on the current use of electronic resources in university libraries, it was revealed that nearly 80 per cent of respondents had some awareness of electronic resources. Nearly half the respondents used both printed and electronic resources, and print periodicals. It also corroborates Ali’s (2005) study which confirms Shuling’s (2007) findings and highlighted the use of electronic information services (EIS) among the users of Indian Institute of Technology (IIT) library in Delhi, India. This also corroborates Dadzie (2005) that the use of electronic resources by students and faculty of Ashesi University in Ghana to determine the level of use, the type of

information accessed and the effectiveness of the library's communication tools for information research and problems faced in using electronic resources. Dadzie (2005) findings revealed that almost 70 per cent of respondents used the Internet to access information, meaning that students were aware of electronic resources on the Internet. In support of Dadzie's (2005) also that of Ansari and Zuberi (2010) and Madhusudhan (2010) that the numbers of electronic journals grow every day, libraries are interested in subscribing to them considering their benefits over print media. He went further to indicate that there is a dramatic shift from print collections to electronic collections which is having an impact on library patrons and on library functions fewer errors encountered and easy to solve using E-resources.

On the collection management of electronic resources in the University of Ibadan. The findings of this study revealed that there was a relationship between the collection management of e-resources and utilization of e-resources. This aligns with the findings of Bothmann and Holmberg (2010) and Ballard and Lang, (2007) that the collection management put in place in the library will to a large extent determine the utilization of e-resources in the library. It also corroborates the findings of Ireyefoju (2012) that collection and adequate management of e-resources such as e-journal, e-book, CD ROM databases, online databases and web-based resources when effectively utilized constitute an important input in the information services in libraries. They help in providing relevant information required by students, which if properly utilised can help in improving reading culture and improve academic excellence. However, Ireyefoju (2012) that the provision of e-resources in the right quantity has been regarded as a major input required for high information services provision.

Summary of findings

The study is to examine the collection management and utilization of e-resources by postgraduate students in the University of Ibadan, Nigeria. From the data analysed and the research questions answered, the findings revealed that:

1. There are management strategies for collection and management of e-resources which include through subscription done monthly, purchase which is quarterly,

consortia on a yearly basis and Open Internet sources on monthly basis for effective service delivery to the university community.

2. The frequency of e-resources uses among post-graduate student in the University of Ibadan revealed that e-journal and EBSCOHOST were used on weekly basis, e-portal on daily basis, maps, Science direct, law report and personnel were equally being used on daily basis. On a monthly basis, Online Public Access Catalogue, AGORA, TEEAL were used.
3. The purpose of using e-resources among post-graduates in the University of Ibadan varies from the assignment, classwork, project, Theses writing, Term paper, seminar presentation and finding information in the area of specialization.
4. The satisfaction derived in the use of e-resources among post-graduate student in the University of Ibadan shows that it makes learning easy such as performing search task with ease.
5. Lastly, the collection management of electronic resources by postgraduates in the University of Ibadan shows that the better the collection strategies put in place the more the utilisation of e-resource among post-graduate students.

Conclusion

Based on the findings, the study concluded that there is a relationship between collection management and utilisation of e-resources among post-graduate students, also the acquisition of resources is done daily, weekly, monthly, quarterly and some are done yearly. The transition from print documents to e-resources in recent times has been quite rapid globally, and academic libraries have been undergoing a tremendous transformation in order to effectively deliver e-resources to the user communities. E-resources add great value to library collections and satisfy the unique needs of students, faculty and research scholars with less risk and time. The use of electronic resources ensures easy retrieval of information and helps to expand students' knowledge base. Electronic resources also carry the potential power of increasing the learning opportunities offered to students in particular. It was also revealed that on how to disseminate information on the acquired e-resources, the university library often schedules an orientation programme to students since the information provided through e-resource could be used for varieties of purpose such as assignment, project writing,

theses writing among others. The study concluded that although the university is putting in place strategies to enhance the quality of services delivered through the provision of e-resources in the library, most students do not always patronize the service rendered.

Recommendations

In view of the findings, the study, therefore, recommends that:

1. The University Library should increase bandwidth and online journal subscriptions, seeking more funds to do so. More bandwidth will also improve access time as the systems will work faster. Subscriptions to print journals should be maintained.
2. The University of Ibadan should improve on the libraries budget in order to attain to the cost of electronic resources and for the training of staff that will handle the electronic collection development.
3. The incessant power supply should be tackled through the provision of alternative power generating source such as power generator/plants that will serve the University community as large. And as a matter of urgency; the university should provide a regular supply of electricity through the national grid so as not to be cutoff.
4. The communication gap between librarians and academic staff should be bridged for the timely flow of information as this would enhance the quality of service delivery.
5. Libraries should train and retrain their staff on technical skills. This is needed in order to handle any technical problems that may arise when handling electronic resources.
6. Training in the areas of software and hardware troubleshooting in developing electronic resources collection should be introduced in the library by the university as this will enhance the quality of services delivered.
7. The university libraries should train the librarians on business and negotiation skills that will enable them to understand the integrity of the licensing and negotiation involved in the subscription of electronic resources.

REFERENCES

- Amusa O. I. & Atinmo M (2016). Availability, Level of use and Constraints to use of Electronic Resources by Law Lecturers in Public Universities in Nigeria. *Italian journal of Library and information science*. ISSN (online) 2038-1026.
- Armstrong, C.J. & Lonsdale, R. (2002). The e-resources mapping exercise. London: JISC, B/http://www.jisc.ac.uk/coll_ebookstudy1.html
- Awoyemi, G. (2011). The case for e-resources literacy: Undergraduate students' experience with e-resources for course work. *The Journal of Academic Librarianship* Available at: [dx.doi.org/10.1016/j.acalib/2011.01.002](https://doi.org/10.1016/j.acalib/2011.01.002)
- Balas, S. (2000). E-information usage among engineering academics in India with special reference to Rajasthan State. *Library Hi Tech*. 29(3), 496-511.
- Ballard, R. & Lang, J. (2007). The hidden benefits of implementing an Electronic Resources Management System.<http://www.library.yale.edu/preifla2007/papers/ballard.pdf>
- Borteye, W. & Dadzie, P.S., (2015), 'Awareness and use of open access journals by graduate students of the University of Ghana', *Innovation:Journal of Appropriate Librarianship and Information Work in Southern Africa*, (abstract), 2015(50), viewed 23 April 2017, from <http://journals.co.za/content/innovation/2015/50/EJC174761>
- Bothmann, R.L. & Holmberg, M. (2010). Strategic planning for electronic resources management.http://mydisk.mnsu.edu/bothmr/tenure-promotion/supportdocuments/criterion_2/e-resplanning-chapter.pdf
- Cabonero, D.A & Mayrena, L.B. (2012). The development of a collection development policy, *Library Philosophy, and Practice* (e-journal). Paper 804.
- Chaiken, R. & Madhusudhan, M. (1998). Use of electronic journals by doctoral research scholars of Goa University, India. *Library Hi Tech News*, 26(10), 12-15.
- Crawford, W. (2000). "Nine models, one name: Untangling the e-book muddle." *American Libraries* 31(8), p.56- (online). Retrieved September 12, 2019 from InfoTrac Web: Expanded Academic ASAP Int'l Ed. (database).IAC, Vendor: Gale Group, daily updating.
- Dadzie, P. S. (2007). Information literacy: assessing the readiness of Ghanaian universities. *Information development*, 2(4), 266-81. Retrieved from: <http://idv.sagepub.com/cgi/content/abstract/23/4/266>. [Accessed on 27-11- 2019].
- Evans, S.M. (2000). The battle to define the future of the book in the digital world. *First Monday*, Vol. 6, no. 6. Available at: http://www.firstmonday.org/issues/issue6_6/lynch/index.html.
- Flatley, R. & Prock, K. (2009). E-Resources collection development: A survey of current practices in academic libraries. *Library Philosophy and Practice*. Retrieved from: <http://www.webpages.uidaho.edu/~mbolin/flatley-prock.htm>. 17/6/2019
- Gold Leaf, N. (2003). "E-books: Report on an ongoing experiment." *Against the Grain* 11(6), pp.23-25.
- Hawkin, D.T. (2000). Electronic books: a major publishing revolution *Online* 24(4):14-28.
- Hughes, C.A. (2003), "E-resources" in DRAKE, M.A., (Ed.) *Encyclopedia of Library and Information Science*, 2nd Ed., Marcel Dekker, New York, pp. 984-89.20.
- Lakan, M. (2005). The role of visual rhetoric in the design and production of electronic books: the visual book *Computer Science the Electronic Library*.

- Landoni, B., Wilson, C. & Gibb, S. (2000). Usage of Electronic Book: A study of e library Database in United Arab Emirates, *DESIDOC Journal of library and information Technology*, Vol. 72, (2):95-100.
- Lynch, C. & Terry, D. (1999). The battle to define the future of the book in the digital world. *First Monday*, Vol. 6, no. 6. Available at: <http://www.firstmonday.org/issues>
- Madhusudhan, M. (2010). Use of electronic resources by research scholars of Kurukshetra University. *The electronic library*, 28(4):492-506.
- Okello-Obura, C. & Magara, E. (2008). Electronic information access and utilization by Makerere students in Uganda. *Evidence Based Library and Information Practice*, 3(3), 14-17. Available at <http://ejournals.library.ualberta.ca/index.php/EBLIP/article/view/935/3328.s> [Accessed on 12-08-19]
- Okello-Obura, C. (2010). Assessment of the problems LIS postgraduate students face in accessing e-resources in Makerere University. *Uganda: Collection Building*, 29(3), 98-105.
- Salam, S. & Aderibigbe, A. (2005). Knowledge and use of electronic information resources by Medical Science Faculty at the University of the West Indies. *Journal of Medical Library Association*, 93 (1), 21-31.
- Shuling, W. (2007). Investigating and analysis of current use of electronic resources in University Libraries. *Emerald*, 28(1/2), 72-88.
- Tedd L.A & Large J.A (2005). *Digital libraries: principles and practice in a global environment*. Munich: Saur 2(1), 305 – 328.