

## TRAINING AND STUDENTS KNOWLEDGE OF ELECTRONIC RESOURCES IN UNIVERSITY OF ROCHESTER LIBRARY

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### ABSTRACT

*Developments in Information and Communication Technologies (ICT) have radically taken over every sphere of activity in university libraries. Academic libraries owe it a key duty to keep pace with technological advancement in order to cope with users' continual sophisticated information requirements. The growing use of electronic resources in and outside the libraries has become a major issue of discussion all over the world. Information seekers, particularly students and teachers are becoming key proponents of e-resource use. Against this backdrop, this paper explores the knowledge of e-resources by undergraduate and post-graduate students of University of Rochester. This paper comes up with some key findings on training in the use of e-resource as well as the challenges in the use of e-resources.*

**Key words:** *Electronic resources, libraries, e-book, e-journal, University of Rochester*

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### INTRODUCTION

The development of Information and Communication Technology and the rapid evolution of e-journals and e-book technologies, specifically, have changed the relevant philosophy for collection development in libraries. A significant transformation has occurred over the last few decades in collection development policies and practices of libraries worldwide. According to Velmurugan (2013), library users' attitude to information is also shifting from the printed documents to electronic resources, and more rapidly so among young users and students. Young users are getting more exposed to electronic resources (e-resources) particularly on the Internet, such as websites and pages, search engines, online journals and databases, online newspapers, online repositories of theses and dissertations, and so on, which they can access directly from the internet and from information centers near to them.

Graham (2003) asserts that electronic resources (ER), more commonly known as e-resources, have gradually taken a central position in library collections all over the world. The term electronic resources has been defined broadly as "information accessed by a computer and may be useful as bibliographic guides to potential sources, but they appear as cited references in their own right". With the emergence of new techniques and technologies, electronic information sources are becoming more and more important to the academic community and an awareness of these resources is of paramount importance to library development in the 21st century (Velmurugan, 2013; Akpojotor, 2016). The use of e-resources has created new opportunities as

well as new challenges for library professionals as they are trying to come up with new techniques and approaches for managing their electronic collections and providing dynamic library services using a whole range of new technologies. The users, on their part, also are trying to cope with the changing situations by making diversified use of electronic resources although many users are still skeptical about the real potentials of electronic resources.

### **Statement of the Problem**

The internet has helped in the amassing of a large amount of information for consumption in varied fields of endeavor. This has brought about increasing ease in the search for and use of information in academic, social, political and other spheres of life. However, despite the increasing simplicity in accessing information, there are indications that some students do not fully utilize information sources in the library. It is observed that most of the students are not knowledgeable in the use of e-resources and they lack the skills to use the resources. Also, there have been difficulties in accessing these resources. Thus, this study investigates students' knowledge of electronic resources in University of Rochester library.

### **Concept of Electronic Resources**

According to Mohamed (2007), electronic resources provide access to information that might be restricted to the user because of geographical location or finances. They also provide access to current information because they are frequently updated. Through their various search techniques, electronic resources provide extensive links to explore additional resources or related content. In addition, electronic resources are convenient to use since users are able to access information from the library, internet cafe', and offices or at times from the comfort of their homes at any time of the day". E-resources reach their subscribers well before the conventional documents, besides their ability to reach all their subscribers simultaneously. Electronic resources solve the missing issue problem that library acquisition departments often face. Articles in electronic formats can be downloaded and printed simultaneously by several readers depending on access rights and permissions. This is a gain for big campuses, particularly ones with hundreds of readers and many departments. These are some of the many reasons "e-journals, online databases, e-books, web based resources and a variety of other electronic resources are fast replacing the traditional resources of modern libraries" (Mohamed, 2007).

Dadzie (2005) mentioned that "electronic resources are invaluable research tools which complement print-based resources in any traditional library". Simply said, e-resources are resources that are produced, preserved, managed, used and shared by electronic means. They require the use of additional tools including computers, e-book reader, smart phone, etc. IGI Global defines e-resources as 'all the information products that a library provides through a computer network. This includes electronic books and journals, bibliographic databases, and library website pages (IGI Global). Library of Congress defines e-resources as 'any work encoded and made available for access through the use of a computer. It includes data available by:

- (1) Remote access and
- (2) Direct access (Library of Congress).'

From the viewpoint of International Federation of Library Associations and Institutions (IFLA), electronic resources refer to 'those materials that require computer access, whether through a personal computer, mainframe, or handheld mobile device. They may either be accessed remotely via the internet or locally (IFLA, 2012).' Today's library and information centres deal

with a wide range of e-resources which include electronic journals, electronic books, full-text databases, indexing and abstracting services, reference databases, statistical databases, audio and visual materials and so on. With the proliferation of e-resources and their increasing use by a wide number of learners, libraries have been trying to make these resources available to their users. This has created some unique challenges for the libraries as well as an opportunity to serve their clients more effectively.

### **Knowledge of Electronic Resources in Academic Libraries**

According to Rehman and Ramzy (2004), access to knowledge is an important asset for development to every human being. Awareness of e-resources is when users of the library have acquired information and knowledge about the existence of e-resources in the library. When users of a library are exposed to information resources available in a particular library, they stand a chance of accessing them and are also encouraged to utilize them judiciously to satisfy their information needs. Awareness of information resources in libraries by users is an issue of much concern, though availability may not be a guarantee to complete usage. Therefore, optimum utilization of information resources by users depends on the awareness of the resources. A research conducted by Chirra and Madhusudhan (2009) showed that 100% of doctoral research scholars are aware of the e-journals of the Consortium and access them. Perchance, these scholars were early adopters of e-journals and other electronic library resources and were more comfortable in accessing these information resources for their academic endeavours.

Rehman and Ramzy (2004) observed that although libraries have provided the state of the arts technologies and infrastructure, these may not be optimally used by users due to lack of awareness of e-resources. On the contrary, Renwick (2005) argued that most students in various faculties are aware of the availability of e-resources but low usage of specific resources. Ahmad and Panda (2013) also added that majority of the faculty members are aware of and use e-resources but some lack knowledge and only use the library's specific resources such as e-theses, patents and CD-ROM databases. Therefore, provision of information resources in libraries by information professionals are not enough until these resources are well marketed and promoted to achieve full utilization by end-users. In catching up with technological trends, the most focused are the academic libraries, with relentless efforts, they provide electronic information to promote modern teaching, learning and research purposes to the university community and beyond. However, there are various means by which user attention can be drawn to the use of information resources of libraries. A study by Soyizwapi (2005) revealed that postgraduate students become aware of electronic databases from a variety of sources such as friends, library orientation programmes and academic staff. Other means of awareness creation are through posters, flyers, brochure, library guide, library website, exhibitions, radio programmes and through word of mouth by lectures or teachers to direct students to information sites.

At one time, libraries tended to be passive where they were custodian of information and only waited to answer user queries. In this information era, libraries are more proactive with the aim to provide users with effective and efficient resources and services. Therefore, libraries that do not adopt appropriate mechanisms to get their resources and services to prospective users are likely to deprive them of benefiting from electronic information resources (Okello-Obura, 2010; Ercegovac, 2009 and Dadzie, 2005). It can be observed that the patronage of a library's information resources improves after they have been well show cased to potential users. Unfortunately, academic libraries may partly achieve this mandate due to limited budgets, inflation and the increasing cost of electronic information resources. Similarly, Egberongbe

(2011) affirmed that e-resources such as bibliographic databases, e-newspapers and e-magazines are not used very much. Undoubtedly, lack of awareness of information resource, prevents users from realizing its potentials of meeting their information needs. More steps need to be taken by information professionals or librarians to ensure maximum use of e-resources by library users. Besides the traditional means of awareness creation, libraries need to adopt more technological interactive means like web 2.0 or library 2.0 technologies to promote their services. For example, the use of Facebook, Twitter, WhatsApp and blogs to interact with users about the library's resources and to answer user queries provides the library with the opportunity to extend their services to cover wider users and also places the library in the world's spectrum (Manda, 2005).

### **Training in the use of Electronic Resources**

According to Tella and Mutula (2008), training involves the process of imparting and empowering people with requisite skills and knowledge to perform tasks. In the context of libraries, users need to be equipped with requisite skills to enable them access and use information resources effectively. Therefore, adequate skills in the use of computers are very necessary since computers are the major means by which electronic resources can be accessed. The rate at which e-resources are accessed and utilized by postgraduate students could mainly depend on some factors relating to users, particularly computer literacy skills. According to American Library Association, information literacy is defined as "a set of abilities requiring individuals to recognize when information is needed and the ability to locate, evaluate, and use effectively the needed information." Computer literacy could be the main support for effective use of electronic information resources. Observations are that effective uses of e-resources most often go hand-in-hand with strong information literacy skills. Users of e-resources are required to gain requisite skills for computer literacy in order to make effective use of electronic systems and information sources.

Tella and Mutula (2008) asserts that it is crucial for academics and students to have competencies in computer skills in order to effectively access information from different sources such as World Wide Web, online databases, e-journals and CD-ROMs to successfully locate, retrieve, organize, evaluate, and apply information in their academic work. Computer literacy can be seen as the alternative means by which users can efficiently and effectively locate access, evaluate and use electronic information to achieve desired purposes. Eshet-Alkalai (2004) opined that training boosts searching skills of users, increase their confidence and morale to make them have efficient and effective access of library's electronic resources. Computer literacy comprises a variety of complex skills such as: booting a computer, how to use a keyboard, edit work, retrieve information from computers, send and receive e-mails, which users need in order to function effectively in digital environments (Eshet-Alkalai, 2004).

Computer literacy is an aspect of information literacy. The ability of students to have knowledge in computer facilities enable them to search, retrieve and use e-resources to enhance learning and research. Training is a fundamental element for helping information users to gain desirable skills, and to appreciate technology as an agent of modification rather than destruction. Tella and Mutula (2008) affirmed from a research that students with higher computer literacy are inclined to access and make use of e-resources readily. Therefore, inadequate training in computer literacy skills is a limitation to the use of e-resources by users. In another research finding, Bowden (1994) maintained that users who are trained in information gathering and who have greater computer skills are more likely to utilize e-resource services. However, not much

assistance is provided to train students to acquire computer literacy skills as required by academic libraries.

Training forms part of the learning process; it empowers information users to have control of conducting independent research for needed information in accessing e-resources. Information literacy promotes lifelong learning among users. This view was supported by Chu and Law (2005) as they observed that knowledge, search expertise and usage of databases grow as the students' progress in their studies. Thus, familiarity with and usage of different databases develop as students' progress in their studies and familiarity are gained through instruction and promotion of databases. Harun (2006) shared the view that the OPAC is the most regularly used one among e- resources provided by the IIUM library. This shows that the promotional aspects of library e-resources need much to be desired. Achonna (2008) observed that usage of electronic journals is low and users cited lack of skills to use the resources and inadequate computers as common obstacles towards usage of electronic resources. Meanwhile, a study by Gakibayo et al., (2013) found that utilization of e- resources does not only affect lack of computer skills and information literacy skills but also lack of enough computers and slow internet connectivity. However, to alleviate these impediments, academic libraries need to put in place mechanisms to enhance accessibility of e-resources.

### **Challenges in the Use of Electronic Resources**

Madhusudhan (2008) and Mulla (2011) reported that the major barrier to the use of electronic journals is the lack of subscriptions in relevant fields of studies and the lack of user orientation or training. This means some users are likely to be deprived of the required information for their academic work. Academic libraries need to invest more in the training and provision of more e-resources to meet the information of all users. Bhatt and Rana (2011) also identified that the most common problems with e-resources are low speed connectivity, lack of awareness about statutory provision for accessing e-resources by the institutions, technical problems, unavailability of sufficient e-resources, doubts in permanency, high purchase price and lack of legal provision. A similar study by Shukla and Mishra (2011) revealed that majority of research scholars have problem of low internet connectivity. Madhusudhan (2010) averred slow access speed of the internet as the most commonest problem. He also added that it takes too long to view or download pages and difficult to get relevant information. He further indicated that too much information is retrieved and the students cannot make use of e-resources effectively due to the lack of proper IT knowledge.

Mulla (2011) revealed that the majority of academics similarly face a problem of lack of training in relation to the use of e-resources. It is clear that the major problems in the use of e-resources as identified are; lack of subscriptions in particular fields of study, lack of user orientation or training, low bandwidth, lack of printing facilities, terminals and training. Undoubtedly, electronic information resources in libraries are unique and so their use may be affected by either the user, institutional or product centered factors. Singh et al., (2011) found that information specialists have long sought to understand the factors that are pertinent in encouraging a person to search for information. Many studies have been cited to show how factors like language proficiency, computer literacy and information literacy can affect the use of electronic information resources of the library (McGuigan, 2001; Huang and Liaw, 2005; Teo, 2006).

Other factors that may affect the utilization of e-resources include inadequate competence in the use of e-resources on the part of users, such as lack of knowledge, negative attitudes, poor

practices and inadequate and limited infrastructure (Manda, 2005). In another study, Alison et al., (2012) affirmed that utilization of e-resources is influenced by human and institutional factors including information literacy, low bandwidth and limited number of resources available to users. The literature review for this study also found that availability of e-resources, discipline and institutional factors affect the use of the resources by students and researchers (Tenopir and King, 2007). One other obstacle to the use of a library's resources and in particular, its electronic resources, is that they are not seen as being easily accessible. This is in contrast to an internet search engine where a single keyword search could result in thousands of hits, no matter the topic. In the library, students have to choose a particular database and be more selective in the search words they use (Waldman, 2003). Similar problems seem to exist among users of e-resources in general but the magnitude of these challenges varies significantly between developed countries and developing countries. A study conducted by Bashorun, Tunji and Adisa (2011) also showed that low usage is reported for e-books, bibliographic databases and e-journals. These attitudes may be the result of lack of awareness about the e-resources provided by the library.

Ozoemelem (2009) examined that there are issues like a large mass of irrelevant information. Other problems are download delay, failure to find information, lack of search skills, high cost of access, power outages, unavailability of some websites, inaccessibility of some websites and difficulties in navigating through e-resources. Oduwole and Akpati (2003) also indicated lack of ICT and power outages as constraints to the use of electronic resources. In the same vein, Tenopir and King, (2007) discovered the inadequate ICT infrastructure and affordable online access as well as absence of in-depth ICT skills as key problems. In addition, lack of information searching skills, and cost of using the cybercafé are identified as barriers to the use of electronic resources. Also, studies have revealed that developing countries are not at par with the developed countries in terms of research productivity. This is due to the fact that not much is invested in the provision of electronic resources which are pivots in research processes. A research finding by Foster (2008) revealed that inadequate access and use of electronic information resources by academic staff for research purposes result to low publication output by African universities. A similar study by Frankor and Akussah (2012) confirmed that academic staff in African universities "had little access to relevant and reliable information when making decisions" on their research activities.

## **Conclusion**

The provision of electronic information resources in academic libraries has provided unprecedented support to modern teaching, learning and research purposes in universities. Electronic resources have become a 'house hold name' for postgraduate students in terms of access to current and convenient information for their academic endeavours. For this reason, it is prudent for academic libraries to prioritize e-resources as the major information resources and ensure its potential usage. Unfortunately, e-resources were not utilized to their fullest by postgraduate students because of low publicity, inadequate training, restrictions of access such as passwords and usernames, and other limitations such as poor internet connection, inadequate computers, as well as power outage and inadequate searching skills which constrained students to depend more on library professionals for their information searches. These problems have affected the accessibility and utilization of e-resources in the library.

## **Recommendations**

The following were recommended:

1. The school authority should allocate more budgets for strengthening the Electronic Resources collection of the university library.
2. A regular basis training, workshop on the usages of e-resources should be conducted faculty wise among the students.
3. Steps should be taken to upgrade the skills and competence of library staff so that they can offer better services to the users.
4. There should be provision of uninterrupted power supply in the campus arena.
5. Teachers should encourage students to use the electronic library materials.

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