

**Challenges Confronting Postgraduate Students in the Use of E-Resources:  
Experience of the University of Cape Coast, Ghana.**

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## **ABSTRACT**

University libraries acquire print information resources such as books and journals as well as electronic information resources to support teaching, learning and research and also facilitate knowledge dissemination. The study examined challenges confronting postgraduate's students in the use of Electronic resources in University of Cape Coast library. Questionnaire was used as the main research instrument. Four hundred copies of the questionnaire were distributed to the postgraduate students; the return rate was 100%. The findings revealed that poor internet network, download delay, difficulty in accessing some websites, insufficient internet access points and lack of searching and retrieving information skills are some of the challenges militating against the use of e-resources by postgraduate students in University of Cape Coast. Based on the findings of the study, we recommend that internet providers should improve their network services on campus. Also, more internet points should be given to the library so that enough points will be dedicated to postgraduate students. Moreover the library should establish helpdesk at the school of graduate studies and a very dynamic and competent librarian should man this, to collate the needs of postgraduate students and proffer solution to them; by so doing the postgraduate students will see the library as a hub for their research activities.

**Keywords: e-resources, postgraduate students**

## **Introduction**

The advent of Information technology gave possibility of production of information resources in different non-print formats. These are commonly called electronic resources or e-resources. They contain same information as their print counterparts but the information is in electronic format or digital format. They can be accessed and retrieval of information stored in them is possible with the use of computers or electronic devices. Some of the common e-resources are electronic journals, electronic databases, e-Books (Naqvi, 2014).

Electronic resources are defined as electronic information resources, and services that users access electronically via computing network from inside the library or remote to the library (Shim, 2001). Electronic resources are invaluable tools that complement the print-based resources in a traditional library. Electronic resources include online databases, electronic journals, electronic books, full text articles and websites. Electronic services include online catalogue, electronic mail, the online inter-library loan form, and online reference books (e.g. dictionaries, encyclopedias, etc.).

The electronic resources are systems in which information is stored electronically and made accessible through electronic systems and computer network. These resources include online public access catalogue (OPAC), CD-ROMS (Compact Disc-Read Only Memory), online-databases, e-books, internet resources (Akpohonor & Akpojotor, 2016).

According to Tsakomas and Papatheodorou (2006), advances in technology and transformations in the information landscape have altered the way users interact with such information systems. The transition from print to electronic medium, apart from resulting in a growth of electronic information, has provided users with new tools and applications for information seeking and retrieval that take their idiosyncrasy into account, rather than obliging them to adapt their own characteristics (Tsakomas & Papatheodorou, 2006).

The major objectives of the adoption of e-resources are to facilitate access to Internet-based information resources, as well as the timely determination of

local and international research output. This, according to Okelle-Obura (2010) indicated that e-resources should result in more timely access to current issues of international research journals and improve user satisfaction with libraries.

With the integration of online information services like full text online journal, electronic books, electronic document delivery services and digital libraries in its library systems, University of Cape Coast is attempting to disseminate information by means of an electronic hybrid online systems.

The University of Cape Coast Library has a wide range of e-resources comprising of Academic Online Journals, Emerald, EBSCO Host, JSTOR Archival Database, HINARI, SAGE Journals, Highwire, African Journal Online, Free Book center, SAGE Knowledge, Taylor and Francis, Free e-Books and E-Journals available for all categories of students. As part of effort to encourage postgraduate students to make use of the e-resources, the School of Graduate Studies, in collaboration with the Library organizes seminar on E-learning. This is for all first year postgraduate students and introduces them to these e-resources. The seminar seeks to introduce students to various data bases, search engines and ways of using the internet to find information for research using e-resources.

The major objectives of the adoption of e-resources are to facilitate access to international information resources via the Internet as well as the timely dissemination of local and international research output (Okello-Obura & Magara, 2008). This has resulted in efficient researches by enabling access to up-to-date literature as soon as it is published; and ensure satisfaction of user needs.

Electronic resources are increasingly available in Ghanaian universities thereby making it possible for postgraduate students to access and use current and relevant literature for studies and research. Postgraduate students use electronic resources as a resource for several purposes. The use of electronic resources by postgraduates comes with a couple of challenges.

Studies have revealed that these factors include poor funding in universities, high cost of Information Technology (IT) equipment, high rate of foreign exchange, poor telecommunication infrastructures and so on (Fatoki, 2008). Prangya and Rabindra (2013) found that lack of training; poor

infrastructure and high cost of usage are the obstacles to utilization of electronic resources by students.

Libraries all over the world make available wide variety of Electronic Information Sources (EIS) for use by all categories of students, researchers and staff in their respective institutions. These EIS form an essential part of the reference services provided by academic libraries. The cost incurred in acquiring and maintaining the material and human resources required in providing e-resources information to clients or library users are enormous and very expensive.

It is in view of this, that it is necessary to ensure maximum utilization of these e-resources, hence the need to appraise the factors contributing to the effective use or otherwise of the e-resources in University of Cape Coast (UCC). Since information seekers are no longer satisfied with the printed materials alone, the only alternative are the use of e-resources in searching for reliable and accurate information. However, there is also little empirical data about how e-resources are being used by postgraduate students in UCC.

### **Research Questions**

This paper is to investigate the challenges confronting Postgraduate students in the use of electronic resources in University of Cape Coast (UCC). Specifically, the research will investigate into:

1. What challenges are encountered by postgraduate students in the use of electronic resources in UCC?
2. What strategies could be adopted to improve the use of electronic resources in UCC by postgraduate students?

### **Review of Related Literature**

A number of studies on the use of e-resources have been carried out previously. The studies use different research methods, such as observation, surveys, interviews, experiments, and transaction log analysis. Each of these research methods gives different types of conclusions.

Tripathi and Jeevan (2008) discussed the different barriers to providing electronic resources and services to students and also gave some valuable

suggestions on how to overcome those barriers, such as the implementation of resources and services, the promotion of resources and services, the infrastructure at the study centres, and the use of orientation and user-education programmes.

This finding is in line with the findings of Egberongbe (2011) when he pointed out that none of the libraries he studied were fully using ICT for e-resources sharing. Madhusudhan (2010) found that the major problems in the use of e-resources were lack of subscription in particular fields of study, lack of user orientation, low bandwidth and lack of printing facilities. A study conducted by Shukla and Mishra (2011) found that the majority of research scholars treated the problem of low internet connectivity as the major infrastructural problem in accessing e-resources in most developing countries in Africa.

Again, a study conducted by Madhusudhan (2010) in India showed that for the majority of respondents, the most common problem was that of slow speed. Respondents further stated that, it took too long to view or download pages and they also found it difficult getting relevant information for academic purposes. Furthermore, some respondents were of the opinion that too much information was retrieved and that they could not make use of e-resources effectively due to lack of proper Information Technology (IT) knowledge.

Bhatt and Rana (2011) identified that the most common problems with e-resources were low speed connectivity, lack of awareness about statutory provision for accessing electronic resources by the institutions, technical problems (software and hardware), unavailability of sufficient electronic resources, doubts in permanency, high purchase price of electronic resources gadgets and lack of legal provision.

Other problems listed by Ingutia-Oyieke and Dick (2010) observed the following as the major problems encountered by students in their use of e-resources. They are download delay, failure to find information, lack of search skills, high cost of access, power outages, unavailability of websites, inaccessibility of some websites and difficulties in navigating through e-resources.

Chimah and Nwokocha (2013), in their empirical study of motivation, challenges and strategies in the use of electronic resources by postgraduate library users in Southeast Nigerian federal universities posited that 22 (18.0%) respondents from the four universities agreed that there are insufficient computers with internet facilities in their libraries. Twenty-nine (24.0%) of the respondents also indicated that incessant power outage was a key barrier to accessing e-resources. Slow internet connectivity was identified as another challenge, representing 17 (15.0%) of the total respondents, 16 (13.0%) of them agreed that they lacked ICT skills which hindered their access to the available e-resources, 12 (10.0%) of the respondents pointed out that they had difficulty in finding relevant information from the e-resources. However, 24 (20.0%) complained of inadequate IT infrastructure as a major inhibiting factor to utilization of e-resources.

Omeluzor, Madukoma, Barmidele and Ogbuiyi (2014) also opined that lack of personal computer and erratic power supply among others are major constraints that inhibit use of e-resources by postgraduate's students in Nigerian universities.

### **Conceptual Framework**

The use of e-resources in an institution's library has a lot of positive effects. In addition to this, Imo and Igbo (2011) stated that the use of e-resources using digitalization promotes access to information for the end user such as researchers, lecturers and more especially postgraduates and also enhances the status of the institution engaged in the initiative at the global level. A digital information resource with the help of e-resource of African origin involves diverse kinds of materials.

In studies conducted by Fatoki (2007), the materials considered for e-resource digital resources include, published articles, theses, dissertations, conference papers, reports, technical and working papers, photographs, newspapers, government official publications, data or statistics, artefacts, maps, charts, artistic paintings, historical documents and African documents and manuscripts.

The importance of e-resource in the area of information gathering and knowledge provisions to human resources in all spheres of life cannot be over-emphasized. It is obvious that academic libraries all over the world and particularly in Ghana are challenged with issues such as poor internet connectivity, epileptic electricity supply, download delay, high cost of accessing information and even subscribing to e-resources.

Despite the above challenges, making e-resources and services available for use by postgraduate students and other users becomes very vital as libraries provide access to information resources such as databases, electronic journal (e-journal), electronic book (e-book) alerting services, online reference tools and these help to improve the quality of teaching and research for postgraduate students (Lee, 2008).

### **Methodology**

Considering the nature of the research problem and purpose of this study, the most appropriate research methodology that was used is the descriptive survey design. The choice of this design was considered most appropriate because a large population were involved in the study. Descriptive survey method aims at collecting data and describing it in systematic manner, given features or facts about a given population (Nwana, 2001).

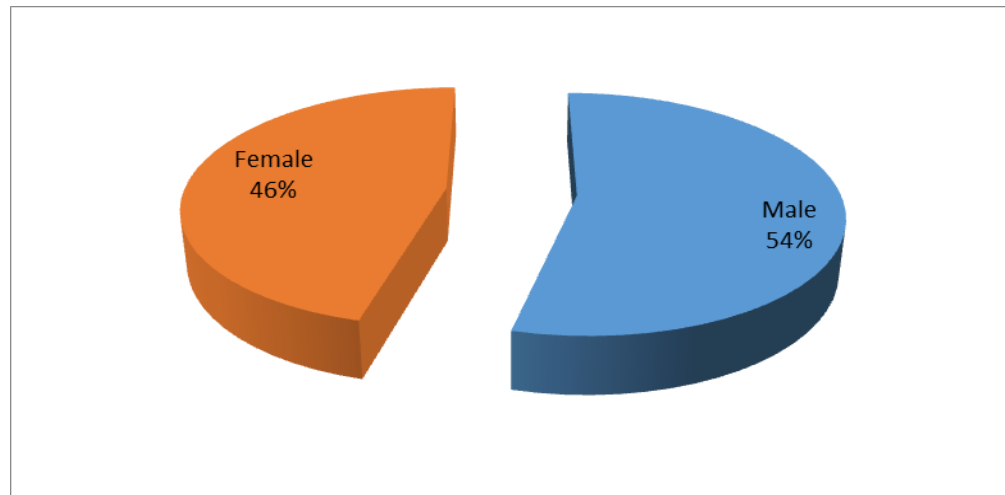
For the purpose of this study, the entire population of postgraduate students in University of Cape Coast was used. The population of postgraduate students is 1,039 (Student Records and Information Management Unit, 2016). The sampling technique that was used is stratified random sampling. The 5 Colleges in University of Cape Coast were grouped into 5 different strata. The Colleges are College of Education Studies, College of Distance Education, College of Humanities and Legal Studies, College of Agricultural and Natural Sciences, College of Health and Allied Sciences. In all, eighty (80) postgraduate's students were selected from each college. Simple random sampling was then used in selecting the respondents from the various Colleges. In all, 400 postgraduate students were selected for the study.



Questionnaire was administered by the researchers themselves and Statistical Product and Service Solutions version 21.0 was used for the analysis. The data collected for the study were analysed using descriptive statistics.

### **Result and Discussion**

Out of 400 postgraduate students sampled for the study, 100% valid questionnaire was retrieved. The demographic information of the 400 respondents selected revealed that 216 (54.0%) were males and 184 (46.0%) were females. This suggests that most of the postgraduate students used in the study were males. The details are provided in figure 1.



**Figure 1: Gender of Respondents**

Source: Field survey, 2016.

In most postgraduate subjects, gender diversity increases when compared to undergraduate subjects, emphasizing that the enrolment of female postgraduate students are on the rise (Office for National Statistics, 2014). Some research studies also revealed that postgraduate female students have equaled or outnumbered men (Addis, 2010). The sample used here tried to bridge the gap.

#### **Research Question 1: What Challenges are Encountered by Postgraduate Students in the Use of Electronic Resources in UCC?**

In trying to answer this, respondents were asked to indicate the challenges they encounter in their use of e-resources. The details of their responses are provided in Table 1.

**Table 1: Challenges Encountered by Respondents in the Use of e-Resources**

Challenges	Frequency	Percent
Poor internet network	124	31.0
Epileptic electricity supply	30	7.5
High cost of accessing e-resources	5	1.3
Download delay	103	25.8
Difficulty in accessing websites	62	15.5
Insufficient internet access points	33	8.2
Lack of knowledge and techniques used for searching and retrieving of e-resources	19	4.7
Lack of proper guidance	4	1.0
Limited subscribed titles or databases	20	5.0
<b>Total</b>	<b>400</b>	<b>100</b>

Source: Field data, 2016.

The findings in Table 1 reveals that 124 (31.0%) of the respondents pointed out that poor internet connectivity hindered efficient use of e-resources, 30 (7.5%) associated their reason to epileptic electricity supply, 5 (1.3%) also associated theirs to high cost of accessing e-resources, 103 (25.8%) related their reason to download delay and 62 (15.5%) also related their challenges to difficulty in accessing websites. Again, 33 (8.2%) indicated that insufficient internet access points affect their decision not to use e-resources, 19 (4.7%) associated theirs to the reason of lack of knowledge and techniques used for searching and retrieving of e-resources on their parts. Furthermore, 4 (1.0%) of the respondents believe that lack of proper guidance on the use of e-resources also pose a problem to them whilst limited subscribed titles or databases constituted 20 (5.0%) of the challenges.

A deduction from the above is that the four major challenges that postgraduate students encounter in their use of e-resources are poor internet network, download delay, difficulty in accessing websites and insufficient internet access points.

The result shows that many of the respondents identified themselves with all the problems listed in the table. This is supported by studies conducted by Ivwighrehweta and Onoriode (2012), Okoye and Ejikeme (2011), Emorjoho, Ivwighrehweta and Onoriode (2012) which reported power outages, inadequate skills to navigate the internet, unavailability of Internet facilities.

This study is also corroborated by findings in a study by Mirza and Mahmood, (2012) regarding problems in using electronic resources and services, 96 out of 800 (12%) respondents identified the need to market e-resources and services; 93 (11.62%) stated that IT infrastructure was inadequate; 75 (9.40%) indicated lack of IT skills among library staff in reader services, and lack of skills among library users in using e-resource as inherent problems in using e-resources and services by postgraduate students. Omeluzor et al., (2014) also opined that lack of personal computer and erratic power supply among others are major constraints that inhibit the use of e-resources by postgraduate in Nigeria.

**Research Question 2: What Strategies could be Adopted to Improve the Use of Electronic Resources in UCC by Postgraduate Students?**

It was also necessary to know from the postgraduate students the steps that can be taken to solve these problems to improve their use of e-resources in the university. Analysis of the result for this aspect is presented in Table 2.

**Table 2: Strategies Adopted To Improve the Use of e-Resources**

Strategies	Frequency	Percent
The University library should improve on awareness campaign on the use of e-resources	156	39.0
Postgraduate students should be taught e-records management information obtained from e-resources	139	34.8
First year postgraduate students should be introduced to electronic information literacy skills in all Colleges	69	17.2
Online searching skills for students should be improved	36	9.0
<b>Total</b>	<b>400</b>	<b>100</b>

Source: Field survey, 2016.

The data in Table 2 reveal that 156 (39.0%) of respondents claimed that the university library should improve on awareness campaign on the use of e-resources which in turn will motivate postgraduate students to use e-resources. This was followed by 139 (34.8%) respondents who stated that postgraduate students should be taught e-records management information obtain from e-resources and 69 (17.2%) respondents declared that first year postgraduate students should be introduced to electronic information literacy skills in all Colleges. Again, 36 (9.0%) of the respondents also indicated that online searching skills for postgraduate students should be improved.

These suggestions for improvement were similar to the reasons given by Odiri (2016). He suggested that university management should incorporate the course of internet and online research into curricular and also students should be encouraged to acquire ICT skills which will enable them to use electronic materials in their academic pursuit.

### **Recommendations**

1. Inadequate access was identified as a problem. Accessibility of e-resources should be improved by providing more computer work stations and data accessibility points through campus wireless network.
2. The university library management should intensify its special user education for postgraduate students so that they will be aware of various e-resources services that are available for them in the library.
3. There should be more awareness on the use of databases and e-resources. The few students that were not conversant with the use of e-books, e-journals, CD-ROM and e-news should be encouraged to use them. This will improve their academic achievement.
4. Postgraduate students should be provided with more chances of formal training in order to acquire skills on effective e-resources use.
5. The library should establish helpdesk at the School of Graduate Studies and a very dynamic and competent librarian should man this. They will collate the needs of postgraduate students and proffer solution to them.

## **Conclusions**

The study concludes that in spite of the comparativeness of e-resources in empowering postgraduate students in University of Cape Coast, certain impediments to the use of e-resources were identified.

Some of the impediments are poor internet network, download delay, difficulty in accessing some websites, insufficient internet access points and lack of searching and retrieving information skills. Therefore, if the identified challenges are not addressed there may be information gap and postgraduate students in University of Cape Coast may suffer setbacks.

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