



Use of e-resources in higher education: Advantages and concerns

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Abstract

Higher education system has grown exponentially in the last five educational systems. E-resources have a prominent role to play in supporting higher education and in fulfilling educational objectives. It, however, creates some tensions among parents and teachers. With the world moving rapidly into digital media and information, the role of e-resources in higher education is becoming more and more important and its importance will continue to grow and develop in the 21st century. Thus, the paper aims to examine the advantages of e-resources in higher education and to identify the various concerns related to e-resources.

Keywords: E-resources, advantages and concern

Introduction

Higher education systems have grown exponentially in the last five decades to meet the demands of quality education for all. In the last five decades, the growth of higher education presents a very impressive picture. There has been commendable quantitative expansion in terms of students' enrolment, number of teachers, colleges, universities and research degrees. The e-resources have become an inseparable part of the educational system.

According to AACR2, an electronic resource is: "Material (data and/or program(s)) encoded for manipulation by a computerized device. This material may require the use of a peripheral directly connected to a computerized device (e.g., CD-ROM drive) or a connection to a computer network (e.g., the Internet)." IFLA defines Electronic Resources as "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".

Some of the most frequently encountered types are: E-journals, E-books, Full-text (aggregated) databases, Indexing and abstracting databases, Reference database (biographies, dictionaries, directories, encyclopaedias, etc.), Numeric and statistical databases, E-images, E-audio/visual resources (IFLA, 2012). Easy communication between teacher-student and student-student on teaching content is also possible. Furthermore, instructional content can be gotten by a teacher through the e-resources and it provides opportunities for sophisticated repertoire of teaching strategies (Go, 2000; Kirschner and Woperies, 2003). The relevance for teaching is not exhaustive but a teacher's ability will determine how efficiently the e-resource can be exploited enhance teaching.

Types of E-Resources

The Internet is a heterogeneous channel with vast educational resources. These resources include: e-books, e-journals, e-mail, inter-linked hypertext documents, online help centres, expert's view, file transfer protocol and so on. Each of these resources has its own set of rules, but they

relate to one another in several ways (Maneroo et al., 2000). Some of these resources are discussed as follow.

E-books

An e-book is the electronic version of a book covering its full contents (text, tables, diagrams, illustrations, etc.). An e-book collection is usually set up in an e-database, which supports full-text searching within and across titles, advanced search and bookmark functions. Users can view full text of e-books in HTML or PDF format online. E-books are usually read on dedicated e-book readers or tablets using e-reader applications. Personal computer and many smart phones can also be used to read e-books.

E-thesis

An e-thesis or electronic thesis describes a thesis in digital form that is generally accessed via the internet. It is intellectual works or research of a researcher. It provides a technologically advanced medium for expressing ideas with less expensive, small space, easy handling and high longevity. UCC is developing an e-thesis programme to ensure that postgraduate research conducted in UCC is widely disseminated. In many countries, a move has been made in recent years to electronic submission of theses, in parallel with hard-copy submission, enabling theses to be searchable and readable online. E-thesis is stored in CORA, the UCC institutional repository. This is an open access repository based on DSpace software. There is no file size limit imposed on e-theses in CORA.

E-journals

With the advent of the internet, researchers and academics have recognized the capabilities of the information and communication technologies as efficient means to share results and to get around barriers by full transfer of intellectual property rights from the author to the publisher; it is also a means of improving the slow turn-over of traditional publishing (Correia and Neto, 2006). An electronic journal is a periodical publication which is published in electronic format, usually on the Internet. It is useful in higher education. According to Rowley (2006)

electronic journals take two different forms: journals that are published in print form, available in digital form and electronic journals which do not necessarily need a publisher, and which can be managed by an editor and the scholarly community. Both types may have a significant impact on scholarly communication and in the way knowledge is created and disseminated.

Online databases

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. Online databases are a collection of electronic information sources (e-journals/e-books) by publishers from various fields and disciplines (Afolabi, 2007). For students to utilize the growing range of electronic resources they must acquire and practice the skills necessary to exploit them (Okello-Obura, 2010).

CD-ROM databases

CD-ROM databases allow users access to relevant databases without robust Internet connectivity in libraries. Besides, CD-ROM databases are of immense value over print if the system is networked, as patrons at their terminals could access information without coming to the library. New modes of teaching, learning and accessing information have emerged as a result of Internet and World Wide Web (Darkwa et al., 2007). CD-ROM databases are important tools for identifying the bibliographic details of potentially useful documents and ensure easy access to large volumes of literature for research.

Electronic Mail (e-mail)

This is an instantaneous electronic message from a sender to the recipient. It is the most used application on the internet. Another variant of the e-mail is to provide a list through which a subscriber receives and participates in a group discussion through e-mail. Each user has a mail box address to which messages are sent (Griffith, 2002; UCB Library, 2004c&d, University Libraries, 2003; Steinger, 2001). The e-mail is relevant for communication between teachers and students, peers (teacher-teacher, student-student), and with parents.

File Transfer Protocol (FTP)

File Transfer Protocol (FTP) is a standard internet protocol for transmitting files between computers on the internet. It allows a computer to rapidly retrieve complex files intact from a remote computer and view and save such files on your computer (UCB Library, 2004d).

Remote Login

This permits a computer user to log on to another computer and use it as if the user were there. Through remote login, lecturers can access to their university's computer from any other computer connected to the internet anywhere in the world. Files can be downloaded even common computer operation like rebooting can be accomplished (UCB Library, 2004c&d). To remote login to a computer, you must know its address which can be words (mail.yahoo.com) or numbers (216.109.127.28).

Gopher

It is one of the earliest resources on the internet. It is the

only method for assessing internet documents. Some gopher texts may still be found linked on the web page, but they are more or less subsumed in the World Wide Web (Griffith, 2002; UCB Library, 2004d).

The World Wide Web (WWW)

The World Wide Web (www, W3) is an information system of interlinked hypertext documents that are accessed via the internet. It has also commonly become known simply as the Web. The WWW incorporates almost every protocol available on the internet (e-mail, FTP, Telnet, Usenet, etc.). Hypertext files can be retrieved and searched through a special protocol known as Hyper Text Transfer Protocol (HTTP) which simplifies the writing of addresses, which are searched on the internet and called up for viewing (Griffith, 2002; UCB Library, 2004d; University Libraries, 2003). The WWW documents are viewed using Internet Browsers, which are software programmes that allow an Internet user to view documents. Examples are Microsoft Internet Explorer (IE), They translate HTML encoded files into sounds, text, image, sound and other web features (Griffith, 2003; UCB Library, 2003d). Through these resources, a student has access to study and research materials, communication tools with teachers and peers, and other developmental benefits.

Advantages

In literature there are many studies related to use e-resources in different fields of education such as medical education, college education, engineering education, and so on. In these studies (e.g. Day and Bartle, 1998; OkelloObura and Magara, 2008), the effects of the use of technology on students' academic performance and efficacy have been investigated. The common point of the studies is that e-resources use can have a positive effect on students' performance if it is properly used. The findings of most studies showed that use of the e-resources are useful for education, in that it can supply many beneficial opportunities to find different resources. On the basis of these studies there are following advantages of e-resources:

- Accessing information through electronic Libraries.
- Helpful in conducting research.
- Submission of assignment through e-mail.
- Data/ File storage through Cloud Computing.
- Concerns.
- Plagiarism.
- Lack of reliability and quality of information.
- Quality control issues with online information.
- Overload of information.
- Financial constraints.
- Changes in work habits.

Conclusion

E-resources represent many challenges at every level of their selection, acquisition, preservation, maintenance and management as discussed in this above article. At the same time, these resources have also come with many advantages giving solution to many professional problems like solution to space problem, providing remote access, convenience in use, increased readership with improved services, leading to more opportunities for productive research output and academic excellence within short time. Recent studies have also proved that in researchers' opinion, improved access to

e-resources have positively influenced their research activities by helping them to keep up-to-date and by saving time.

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