

Original Article

Online Education Development and Delivery: The Role and Functions of Academic Libraries

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Abstract - More and relevant information is made available through the web. Search engines ensure the accessibility of these materials, and groupware allows asynchronous communication between teachers and students worldwide. Academic libraries are, therefore, at the center of global information crises. This paper focuses on the relevance of academic libraries in the online learning environment, which its key focus and emphasis is the improvement of research, teaching, and learning in academic institutions. The paper, therefore, discusses the place of academic libraries in online or e-learning environments and highlights how modern academic libraries provide technology-based information anywhere, anytime, besides providing resources for innovative lifelong learning. Finally, the paper brought forth the role of academic librarians in the delivery of online education in Nigerian institutions towards the enhancement of the teaching and learning process for better productivity.

Keywords - Online Learning, Academic Libraries, Librarians

I. INTRODUCTION

A great psychologist skinner, referring to the first days of his 'teaching machine' in the late 1950s and early 1960s, posit that, I was soon saying that, "with the help of teaching machines and; program instructions, students could learn twice as much in the same time with and with the same effort as in a standard classroom". Undoubtedly, there are now profound changes' going on in the educational system. Those changes arise because of overgrowing pressure in the school systems themselves, partly because of the developments in information and communication technologies that are transforming our ways of teaching and learning. Both of these factors evoke change and offer solutions to the problems with which the education system struggles to overcome.

By confronting trends and technological development, experts in educational fields arrive at a vision of a "global learning infrastructure" in which the role of schools and universities will be drastically changed, resulting in a radical transformation of the education system. "These transformation leads to the ongoing

debate about whether it is the use of and particular delivery technology or the design of the instruction that improves learning, among students"(2001).[1]

It has long been recognized that specialized delivery technologies in modern Information Communication Technology (ICT) equipment can provide efficient and timely access to learning materials. However, (1983)[2] has claimed that technologies are merely vehicles that deliver instruction but do not themselves influence student achievement. As Clark notes, meta-analysis studies on media research have shown that students gain significant learning benefits when learning from audiovisual or computer media, as opposed to conventional instruction. The same studies suggest that the reason for the loss; a benefit is not the medium of instruction but the instructional strategies built into the learning materials.

E-learning, according to (2002) [3], is the use of electronic technology to deliver education and training applications, monitor learners' performance, and report learner's progress. [4] (1998) define it as "an innovative approach for delivering electronically mediated, well-designed, learner-centered and interactive learning environments to anyone, anyplace, anytime by utilizing the internet and digital technologies in concern with instructional design principals." It is all about learning with the use of computers. In this age, learning with the use of computers is simply online ways of knowledge through the internet or through the offline CD-ROM. The online involves the use of internet Explorer/Navigator. It may be in the form of audio, visual, and or audio/visual. The convergence of the internet and learning or internet-enabled learning is called e-learning. The convergence of the internet and learning include computer-based learning, web-based learning, virtual classroom, and digital collaboration where content is delivered via the internet, intranet/extranet, audio and or videotapes, satellite TV, and CD-ROM.

With the advent of the computer, the nature of libraries has changed dramatically. Computers are being used in libraries to process, store, retrieve and disseminate



information. As a result, the traditional concept of the library is being redefined from a place to access books to one which houses the most advanced media, including CD-ROM, internet, and remote access to a wide range of resources. Libraries have now metamorphosed into digital institutions. Gone are the days when a library was judged by its quantitative resources. Today libraries are surrounded by networked data that is connected to the vast ocean of internet-based services. Moreover, electronic resources relevant to the professions are developing at an unprecedented pace. Academic libraries are considered to be the nerve centers of academic institutions which support teaching, research, and other academic programs in various ways. Demographic changes, technological advances, and globalization have totally changed the concept of education. Teaching-learning is a delicate process that needs to be standardized throughout the world. The important question today is no longer whether to implement e-teaching and e-learning in academics to at how to run it well and to get the best out of it.

II. ACADEMIC LIBRARIES AND ONLINE LEARNING (E-LEARNING)

According to [5](1997), to promote higher-order thinking on the web, online learning must create challenging activities that enable learners to link new information to old, acquire meaningful knowledge, and use their metacognitive abilities. Hence, it is the instruction strategy and not the technology that influences the quality of learning. In relation to this, therefore, it could be noted that e-learning could only be effective with the combinations of technology and effective instructional mythology. Thus, [1],[6] (2001) argues that the particular attributes of the computer are needed to bring real-life models and simulations to the learner; thus, the medium does influence learning.

It is important to note that it is the computer and related ICT equipment per se that make interaction with those modes and simulations. The interaction in this learning process involves that with the learning materials in the form of an e-book, e-journal among others. This will make online learning to be flexible, easy to access, from anywhere, and usually at any time. It also allows participants to collapse time and space [7], (2000). However, the learning materials must be designed properly to engage the learner and promote learning, and this cooperates libraries and librarians fully into e-learning activities.

Academic librarians generally serve the subject academicians to provide information regarding teaching, learning, and research. Though not everywhere, yet e-learning has been integrated into the

curriculum of most of the universities and other academic institutions in Nigeria. From the library side, it has been a great opportunity to integrate the library resources and services in support of learning, research, and outreach. In recent years, several bold steps have been taken to integrate e-learning with academic work. Most of the modern academic libraries are digital, and e-learning can effectively take place in a digital environment.

Academic libraries in an e-learning environment provide via an online gateway and digital resources. These learning resources enable curriculum delivery and the general learning management system, which is at the central stage in e-learning. The library in the e-learning environment is critical and an important component of e-learning. It provides resources for all students and researchers for enhanced teaching and learning activities. Academic libraries apply appropriate communication technologies in support of e-learning and e-research by providing seamless access to electronic resources and services. Electronic resources include online catalogs, databases, multimedia, online journals, digital repositories, electronic books, electronic archives, and online electronic services.

The utilization of cutting-edge technologies by academic libraries to provide access to resources and services in support of learning, teaching, and research has benefited both on campuses, part-time as well as distance learners. Both students and lecturers can undertake learning and research without being in the library. An academic, faculty, and academic development department managing e-learning may use appropriate technologies to facilitate learning and access to resources and services. It is quite understandable that an e-learning environment can provide both students and faculty with sustainable infrastructure and seamless access to knowledge, course content, information resources, and services, all from an integrated service point.

The initiative which should be taken by the academic should take the initiative towards the establishment of an e-learning support center that would undertake the training of the academic staff in integrating the educational technology into the curriculum to provide access to the content. As part of this initiative, an Educational Technology unit will develop e-learning smart classrooms, along with video conferencing and assignment tools enabling flexible learning and teaching with the students studying at their own place. The academic library must have a holistic approach in e-learning whereby different traditional and digital methods and media are integrated into learning and teaching repertoire; libraries play a key role, helping to

find and organize resources to complement programs and courses making use of e-learning in order to provide support to students working through their assignments.

III. ROLES OF ACADEMIC LIBRARIANS IN E-TEACHING AND E-LEARNING

According to [8] (2008), online learning has many promises, but it takes commitment and resources, and it must be done right. "Doing it right" means that online learning materials must be designed properly, with the learners and learning in focus and that adequate support must be provided. Therefore, this suggests that online learning should have high authenticity, i.e. (students should learn in the context of the workplace), high interactivity, and high collaboration.

Adequate support and high collaboration in e-library activities entail that all those concerned in the teaching, learning, and research processes of academic institutions must have input this is because online learning involves the use of the internet to access learning materials; to interact with the content, instructor, and other learners; and to obtain support during the learning process, in order to acquire knowledge, to construct personal meaning, and to grow from the learning experience.

Nowadays, academic librarians are part of the e-learning process and are actively participating by providing online and in-person modules, guides, subject, and class-based lists, as well as references (synchronous and e-mail).

The librarians offer classes and courses on research strategies, help students in determining useful scholarly resources, work with the faculty in planning and developing distance education courses (in particularly online courses) to integrate concepts of information literacy throughout the curriculum. Faculty needs support in these activities because the ability to articulate information needs, find appropriate information resources, and critically assess the result of an online search are key to success in e-learning, and this leaves the faculty to focus on course content. In the case of libraries, what is good for online students is also useful for campus-based students. According to [9] (2009), libraries contribute to educational development by assisting beneficiaries to:

- Developing skills in library use.
- Regularly involving the library in study and research.

- Exploring the library in solving problems, including personal life problems.
- Improve academic performance.

By a study, it was seen that the librarian facilitating the e-learning are establishing a positive relationship between the academic achievement and use of open shelf library books. The librarians play a role in supporting instructors and administrators to realize the potentials of e-learning through the provision of service models unique to libraries. Librarians have been found to develop web-based modules to support course-integrated instruction sessions, encourage students to actively follow the librarians' presentation using their own topics for selected searches. Students receive immediate feedback on search strategies during the session and can return at any time to refresh their skills for subsequent assignments at the reference desk.

Academic libraries, as organizations that are essential services-oriented, perform some practical roles using modern ICT facilities. These services in an e-learning environment are intended to satisfy the demand of users and their information needs. Among these services are indexing and abstracting services which are intellectual activities that evaluate and analyze the contents of information on library resources. Closely related to this is Selective Dissemination of Information. This service is a specialized service where librarians provide specialized information to meet users' needs. Other services include the Compilation of Bibliographies, Current Awareness Services, and Resources Sharing. All these services are important and necessary for libraries in their day-day activities, especially in an e-learning environment.

This blended approach to information literacy offers students and instructors an ability to address diverse learning styles and encourage active participation along with the presentation to a 24/7 access that may foster increased student contact with the librarians. Many librarians, especially university librarians, are working with online course developers as well as instructors in traditional courses to provide online guides and help for library research, which includes modules that introduce students not only to specific resources but to critical evaluation of resources, such as thesis preparation and the like. As with face-to-face library connection, those modules are very effective when integrated into the course and research materials provided by an instructor. The requirements on the part of the librarian to be part of e-learning are:

- i. Must be proactive in questioning the selection of learning management systems and complimentary e-learning tools by faculty and Departments
- ii. Actively seek representation through appointment to committees that deal with selections, management, and government of online instructions systems on their campus.

IV. BENEFITS OF ONLINE LEARNING

Increasingly, organizations are adopting online learning as the main delivery method to train employees. At the same time, educational institutions are moving toward the use of the internet for delivery, both on campus and at a distance. However, for organizations and institutions to make this often expensive move, there must be a perception that using online learning provides major benefits. Some of the benefits for learners and instructors are outlined below:

- i. For learners, online learning knows no time zones, and location and distance are not an issue. In asynchronous online learning, students can access the materials at any time, while synchronous online learning allows for real-time interaction between students and the instructor. Learners can use the internet to access up-to-date and relevant learning materials and can communicate with experts in the field in which they are studying. Situated learning is facilitated since learners can complete online courses while working on the job or in their own space and can contextualize the learning.
- ii. For the instructor, tutoring can be done at any time and from anywhere. Online materials can be updated, and learners are able to see the changes at once. When learners are able to access materials on the internet, it is easier for instructors to direct them to appropriate information based on their needs. If designed properly, an online learning system can be used to determine learners' needs and current level of expertise and to assign appropriate materials for learners to select from to achieve the desired learning outcomes.

V. CONCLUSION

In conclusion, it is impotent to stress the fact that online education includes mechanisms to facilitate the development of and access to a variety of learning services, an underpinning technological platform. Its growth and development are reliant on the capabilities of e- teachers to see the promise offered by or line opportunities and to understand the ambiance of the new environment. All these are done in the academic community to help potential learners select and enroll in learning experiences.

With the emergence of improved information technologies, libraries have also been early adopters of new information systems and services and have institutional access points for digital knowledge resources such as online journals and special media collections. These materials are important in e-learning development and delivery. Libraries and academic librarians are playing a key role by way of helping to find and organize resources to complement programs and courses, making use of e-learning, and provide support as students work there through their assignments.

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