

Academic Library Support in a Blended Learning Environment: The Place of Embedded Librarianship

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Abstract

Technology advancement has led to significant paradigm changes in education. The tradition face-to-face learning is now being supplemented, or in some case, replaced by virtual learning leveraging on modern information technology tools. This practice of mixing traditional and technology in teaching and learning is referred to as blended learning. Academic libraries as designated support institutions for academic activities are also expected to come up with strategies to ensure that both teachers and learners have the necessary support to effectively carry out their teaching, learning and research activities as usual. One of the strategies that have been suggested by scholars is embedded librarianship. This paper explores the strategies that can be adopted by librarians in Nigerian academic libraries to ensure that relevant library information resources and services to both students and lecturers, are embedded into the evolving learning environment for both lecturers and students in tertiary institutions.

Keywords: Academic libraries, Blended Learning, Embedded librarianship, Information Technology, Library Technology.

Introduction

The environment in which academic libraries operate is a dynamic one which requires that librarians must be constantly on their toes anticipating new trends and devising strategies to deal with them in order to ensure that library's set goals are consistently met. The advancement in technology is driving real revolution in the educational sector to which academic libraries belong, just as is been witnessed in other sectors. Today, technology has made it easy to overcome challenges such as rising students' population, demand for distance-learning and even lockdowns caused by unforeseen pandemics (Amponsah, Ussher, and Benjamin, 2021). The availability of various technological tools has led to the emergence of a teaching and learning strategy called blended learning.

Blended learning (BL) is a learning structure in which physical, face-to-face learning goes hand in hand with virtual learning which is delivered remotely through various digital applications. It is a pedagogical approach which combines several learning methods and styles especially with the aid of ICT tools to promote efficiency and effectiveness in teaching and learning (Adebayo et al., 2019). Blended learning has become essential, especially for institutions in developing countries as a way boost the quality of education and prepare graduates capable of competing favourably in a globalized world dominated by the application of information and communication technology (Yamada, 2015).

Blended learning has personalised the learning experience by allowing students to access educational contents at their own pace irrespective of where they are and when they choose to study. It also has the advantage of enriching the learning content by providing the opportunity to integrate multimedia resources into the course material. It has also enhanced the relationship between learners and tutors by facilitating unrestricted interaction which can extend beyond the scheduled learning period (Amponsah, Ussher, and Benjamin, 2021)

Nigerian universities, like several others around the world have embraced blended learning where students and lecturers, in addition to regular physical classes, are also connected through learning management applications such as Moodle, Blackboard, Edmodo and Google classroom (Nicholas-Omoregbe, Azeta, Chiazor, and Omoregbe, 2017; Oguguo, et al., 2021); communication applications such as Zoom, Google Meet, Hangout (Adewole-Odeshi, 2014), and social media applications such as Telegram, WhatsApp and YouTube (Okereke, 2014; Musa, 2015). Using these tools allow lecturers to conduct real time, face-to-face lectures and also pass lecturer notes in textual, graphic and audio formats to student who are able to access them at their own convenience. Logically, these significant changes will have an effect on the relationship between students and the library.

The Role of the Academic Library in a Blended Learning Environment

The common assumption is that the emergence of technology and its subsequent infusion into teaching, learning and research has diminished the dependence of academic institutions on

academic libraries. This is a misconception that can deny students and tutors alike the opportunity to enjoy the maximum benefits of educational technology and reach the level of academic quality demanded in the information age (Boyer and Kelly, 2014). This is because, librarians have anticipated the development of technology and they have been developing capacity to operate in a blended learning environment for decades. The idea of blended librarianship emerged about two decades ago. Blended librarianship is defined by Bell and Shanks (2004) as the combination of the traditional skill set of librarianship with the modern digital literacy skills, and the instructional or educational designer's ability to apply technology appropriately in the teaching-learning process.

Traditionally, librarians and information professionals have been trained to meticulously select information resources with the users in mind. They are also trained to produce information products such as abstracts, indexes, bibliographies and others designed to help various categories of users navigate the available ocean of information and easily select the most appropriate ones for the task at hand. All these skills have been enhanced with the integration of information technology in library operations (Soleymani, Mojiri, and Zadeh, 2017). Librarians and information professional have had to adapt to various technologies in the course of their daily activities. Therefore, they have developed an appreciable level of digital literacy skills which place them in a vantage position to play a significant role in a blended learning environment (Boyer and Kelly, 2014).

The success and effectiveness of blended learning as an emerging practice in education depends greatly on the level of information and digital literacy skills of students. Smith and Hill (2019) reported that even educators need to be trained in order to make effective use of learning management systems. This is the same for students who may feel helpless when trying to access the system remotely without the necessary technical support.

Librarians and information professionals are also essential in providing the necessary information resources to support all the academic programmes. There is ample evidence to show that the common belief that everything a students need to succeed is available on the internet is a myth. It is not uncommon for students to report that they cannot the right materials for an assignment which often lead to multiple students submitting the same write-up. This is because not everything

available online is free and easily accessible. Even the easily accessible resources are often misused due to lack of information literacy skills.

Various studies and anecdotal evidence show that students are more likely to just make use of the first article that comes up on the screen for assignment or class works. Most of the time these resources are of questionable origin and may contain more misinformation than real information. Indiscriminate consumption of biased, distorted and one-sided information is an antithesis to the principle of critical thinking that academic institutions are expected to inculcate in learners.

Another key issue in the technology rich learning environment is plagiarism. It is an act frowned upon by academic institutions which is nonetheless highly prevalent despite various steps taken to curb it. Studies have shown that majority of plagiarism committed by students arise out of ignorance due to lack of proper information literacy skills training. Majority of students have been shown to lack basic knowledge on referencing and the philosophy behind citing consulted sources to acknowledge the authors whose ideas have been incorporated into their own works. All these and other issues can impact on the effectiveness of the learning process and affect the overall quality of academic output of any institutions. However, this can be avoided through the practice of embedded librarianship.

Embedded Librarianship

Embedded librarianship is a strategy in which the library is immersed into the whole teaching and learning process, not only at campus-wide level, but at the granular level such as individual courses, programme and departments. It is characterized by the active participation of librarians and information professional in the design and implementation of learning strategies. According to Gray (2021), embedded librarians are information professionals who provide more direct research support to lecturers and students apart from the usual one-time instruction session, frequently over the course of a whole semester.

Embedded librarianship as a strategy was introduced to enable librarians as information specialists used their skills to in such a way as to directly impact on the quality of learning and academic output in the institutions (Jantz, 2017). The strategy makes it possible for librarians to transition

from a supportive role to one of collaboration with their customers, allowing for the establishment of deeper working relationships and connections. This is what is regarded as moving from passive, reactionary service orientation to active, pre-emptive and innovative service orientation.

Embedded librarianship in academic institutions can operate on three levels, that is, physical, organisational, and virtual embedding (Corrall and Jolly, 2019). The focus of this paper is on virtual embedding which is application to virtual learning aspect of the blended learning. In this case, embedded librarianship refers to the provision of library services in a virtual environment to meet the learning needs of a particular group of learners (Makhafola, 2018). According to Boyer and Kelly (2015), embedded librarianship requires that the librarian become part of the academic activities in their institutions. Specifically, it requires that librarians developed customized services and products relevant to particular courses and learning objectives instead of the usual generic services which attempts to provide for all possible scenarios.

Crowther (2022) reported that librarians embedded in courses or departments work with lecturers to develop the most appropriate and accessible reading lists for the course so that learning is more robust. These librarians are expected to provide course materials in various formats such as video, audio, graphics and simulations.

Librarians who are verse in information retrieval, information evaluation and ethical use of information resources can be embedded into research methodology and other research related courses. Adequate information retrieval skills and information literacy is essential, because active researcher would agree that acquiring relevant research materials can often be a great challenge.

Services Rendered by the Embedded Librarian

Embedded librarians work collaboratively with instructors to provide students with access to information resources. To do this, librarians are granted access to all learning management systems in the institutions as well as individual courses and programmes being run in the university. In addition to have a section for information resources on the platform, the librarian is also a part of specific courses with the opportunity to make strategic inputs in areas such as finding relevant information resources, citations, using the digital learning platforms etc. Librarians cooperate with

teachers to assist students with assignments that incorporate library resources and to answer students' queries about library materials (Boyer and Kelly, 2015).

In outlining how embedded librarianship operates Gray (2021) explained that the librarian is included in each course platform and is expected to post announcements from time-to-time regarding information literacy sessions and providing relevant library resources. The librarian can also create a custom reading list consisting of books, journals and internet sources to help students with assignments and course works. In addition, the librarian will provide assistance for the lecturer and students in the following areas:

1. Searching the library information system and databases
2. Understanding the research process
3. Narrowing (or expanding) research topics
4. Providing relevant library content
5. Linking to electronic resources
6. Moving beyond Google and Wikipedia to scholarly, academic sources
7. Choosing keywords, search strategies, and tips
8. Creating how-to digital tutorials
9. Citing sources correctly according to the referencing style accepted in the institutions

Strategies for Effective Embedded Services

Even in institutions with properly articulated policies of blended learning, the role of the librarian is often overlooked. So, the initiative of establishing effective embedded service has to come from

the librarians themselves. Straszc (2021) outlined the following strategies that have been found useful by librarians in other climes;

Get in from the beginning. Librarian, especially subject specialists, have to be proactive scrutinizing locating communication intensive courses or courses with a research component in their subject areas at the start of each semester. Librarians should then make contact with lecturers teaching these courses and request that they be included as embedded librarians. Straszc (2021) warned that librarians should not expect immediate positive response, or any response at all. However, with persistence and proper presentation of the scope and benefits of the proposed services, lecturers have been known to become open to embedded librarians in their courses.

Collaborate with lecturers to review and determine the scope of services to be rendered. It is important for the librarian to understand the extent to which the lecturer want the librarians to be involved in the course. There should be an agreement regard the format and level of information resources to be provided for the learners. The librarian then adds the link to the relevant information resources on the learning management system. It is advised that the librarians identify themselves properly and provide detailed contact so that students can easily reach them for further consultation.

Be aware of course milestones and due dates. Once embedded, it is important for librarians to be aware of all assignments and course works as well as their due dates. This is important for two reasons; it enable the librarian to provide a customized guide to relevant resources and, to know when to offer the necessary guides to students in term of how to obtain the necessary information resources.

Reach out and engage with students regularly. It is a good idea for the librarian to send an email to the students introducing themselves and describing what they may anticipate from an embedded librarian. Communication such as this create more awareness for the library and its services.

Knowledge and skills Required for Successful Embedded services in a Blended Learning Environment

In order for librarians to succeed in the provision of embedded library services, Soleymani, Mojiri, and Zadeh (2017) opined that they must possess certain skills that will enable them to deliver all

the necessary services and overcome various challenges that may arise in the course of discharging their duties. These skills include the following;

Digital Literacy Skills

Librarians who would engage in embedded librarianship are expected to have skills in web page design, familiarity with various file extensions, data storage and backup, file management (compression, sharing, etc.), ability to install and use software applications, and familiarity with data security in information networks. These skills are non-negotiable for effective embedded librarianship in a virtual environment because the information and services required are usually in the digital format accessed through various digital platforms some of which are expected to be created by the librarians themselves.

Knowledge of Learning Management Systems

Librarians must familiarize themselves with all the learning applications in use in their institutions and others. In addition to this, they must be familiar with content management methods, testing and evaluation methods, as well as communication and interaction methods used in virtual learning. Most importantly, they are expected to be familiar with technical and nontechnical support requirements for the learning management system. This is important as they are often expected to help educate the students on how to make effective use of the platforms.

Digital Reference Service Skills

Digital reference services are the information services and assistance provided by librarians to library users through the use of online digital devices. Effective digital reference service includes information search and retrieval, providing synchronous and asynchronous services, digitizing information sources, creating electronic learning aids, conducting online reference interviews, being familiar with virtual tours, and being familiar with electronic informatics services.

Information Literacy Skills

It is assumed that librarians, by the virtue of their training, possess some level of information literacy skills. These skills enable the librarians to accurately identify users' information needs, the relevant sources from where to get the required information and how to repackage the information

in a way most suitable to the ability and needs of the users. The librarian is also expected to train the students on these skills. Librarians already have the responsibility to develop the students' information literacy to equip them with the knowledge of online databases and web resources, the ability to evaluate electronic resources, familiarity with reference management software such as EndNote and Mendeley; the knowledge of how to properly cite information sources, the ability to publish articles in professional scientific journals, and familiarity with examples of plagiarism.

Interpersonal Skills

The success of embedded librarians revolved around skills such as collaboration skill, negotiation skills, communication skills, listening skills. All these are needed in dealing with both the students and the lecturers. Lecturers may be reluctant to allow what they see as intrusion into their courses. It therefore depends on the negotiation and interpersonal skills to convince the lecturers to create room for customized information services in their courses and to collaborate with the librarian to enrich the learning experience. These skills are also need in dealing with students who often overrate their information search and retrieval abilities.

Conclusion

It is obvious that technological advancement will continue to impact on the nature and practice of librarianship. For academic librarians, the rise in the acceptance and popularity of blended learning is another opportunity for librarians to demonstrate their competencies by embedding themselves into the virtual environment into which modern day teaching and learning has expanded. This is not expected to be difficult to do as librarians are already embedded physical into departmental and faculty libraries in their institution in order to provide more customized services to various categories of information users.

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