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# BLENDING LEARNING IN HIGHER EDUCATION: IMPLICATION AND STRATEGIES FOR ACADEMIC LIBRARY SUPPORT

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## Abstract

Following advances and extensive use of information and communication technology (ICT) in education and the current tech savvy generation of learners in higher institutions of learning, blended learning is gaining popularity as it is adjudged effective in improving both teaching and learning process in higher institutions of learning. It has the potential to expand access to quality education and break learning barriers in developing countries. Blended learning has created a paradigm shift in library services, however, not all academic libraries in developing countries have understood their roles in blended learning environment. Academic library can play significant roles in collaboration with faculty. The paper examined innovative strategies that academic libraries can adopt to make effective use of blended. The paper examined the state of academic libraries in developing countries with emphasis on their ability to participate in an embedded learning environment, it revealed that traditional learning methods is still prevalent in many developing countries, the paper considered factors that enhance and hinder academic libraries intervention in a blended learning environment. Competencies and skills required by academic librarians to be relevant in an embedded learning environment were discussed. The paper proffered workable recommendation for implementing a blended learning environment. In conclusion, the paper recommends that librarians in developing countries must be intentional about skills acquisition so as to be well equipped to join their counterparts in other developed climes to play a significant and principal role in the ever dynamic sophisticated learning environment.

## 1 INTRODUCTION

The academic library is popular for its role in acquiring, organizing, preserving, and creating access to information. The integral function of the academic library is to support teaching and research in higher education. With evolution of technology globally, academic libraries are also seeking for innovative pathways to serve faculty and students more effectively. They are often expected to adopt digital technologies for service functions. They are mandated to provide leadership and training in instructional technology. (Spante, Hashemi, Lundin, & Algers, 2018).

With advancement in ICT leading to e-learning technologies, blended learning has evolved and can effectively combine the traditional face-to-face learning and e-learning. Blended learning is gaining popularity in literature. Many definitions abound in literature, it has been defined from different angles by different authors. To give a broad definition, 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.

Blended learning can be instrumental in reducing Inequality within countries and among nations. Oliver (2004) suggest that quality education is tantamount to economic growth, better health care and many advantages too numerous to count. The mission of higher education (HE) revolves around the generation of new knowledge and preparation of graduates for ability to function in an ever evolving and competitive society. Findings by Barro and Lee (2013) reveal that the level of education around the world the globe is on the rising at an impressive rate. Similarly, Ganimian and Murnane (2016) observed that there has been a remarkable increase of higher institutions of learning in developing countries. This is also corroborated by Mahajan (2016) and Warning and Duerrenberger (2018) who posits that most developing countries especially Africa are witnessing a substantial rise in higher education enrollment. Many scholars have reported that the traditional approach to teaching and learning is still the norm in many regions in the developing countries. (Nawaz & Ahmad 2011). Blended learning has been described by Hogan (2011) as being much more than just a teaching method but a basis of economic survival for developing countries.

## 2 NEED FOR BLENDED LEARNING

Blended learning would be instrumental to a transformative learning for students in developing countries. It encourages a shift from emphasizing just course content to a pedagogy based on a new learning paradigms. Blended learning encourages the adoption of technology and learning analytics as key in content delivery. Many institutions of higher learning in developed climes approach have adopted blended learning approaches as opposed to developing counties where traditional learning methods is prevalent (Nawaz & Ahmad 2011).

With the demands of globalization and rapidly changing technologies, developing countries must do away with traditional learning methods as they do not satisfy the witty and tech savvy needs of the new generation of learners (Glewwe, 2013). Traditional learning takes place in a specified location, at a stated time by a known instructor. Traditional learning is giving way to blended learning in this age of advances in technology. It becomes imperative for developing countries to reorient and have a paradigmatic shift from traditional learning.

The call for blended learning is necessitated by the need for repositioning and improving the capacity of higher education to meet the needs of an age of globalization. Furthermore, the graduates produced from developing countries also lack the needed innovation to harness and compete in a rapidly changing scientific and technological world. (Yamada, 2015).

Blended learning makes for a more effective pedagogy by increasing chances for active and student-centered learning. It increases access to more knowledge breaking geographical barriers with the advantage of convenience. Blended learning bears a profound impact on classroom instruction. The advantages are numerous. It increases the possibility for learners to gain access and exploit relevant learning resources and for much more resources to be fully embedded within the curriculum. (Dale, & Cheshir, 2009).

With blended learning, mode of instruction can be customized and made specific to individual learning styles, interests, abilities, needs and preferences. Agarwal (2015) warns that the adoption of blended learning is inevitable as students will increasingly be engaged in experiential and interactive learning. Students will continue to learn from themselves and their environment just as much as they would from their professors. Further predicting the need for a blended approach to learning, more also discovered that more learners will desire to have a platform that will enable them discover concepts and facts on their own which blended learning can achieve. (Omiunu, 2017).

Factors such as level of Internet penetration, massive popularity of mobile and hand held devices, growth of some better funded private higher institutions of learning, more institutions can are better positioned to participate and benefit from technology-enabled innovations. (Chou & Chou2011).

**STRATEGIES:** To achieve success at the implementation of blended learning the following strategies must be considered:

**ICT Policy:** for maximum benefit in a blended learning system, the library should play an active role in drafting and providing a clear, concise and friendly policy for the use of ICT in learning and teaching in the institution. It is globally accepted that ICT has made tremendous impacts on higher education but to forestall misuse when liberalized in the classroom, a policy statement is essential. Such policies should be flexible and more responsive (Husain, S., & Nazim, M. 2015).

**Training:** There is an increasing global demand for ICT competence among students and faculty as the effectiveness of any e-educational system depends to a large on the ICT expertise of its students and educators. Subsequently, the success of teachers or educators depends on how well they are prepared for their roles within a changing and challenging system. (Thomason, 2013). Where the introduction of new technology meets resistance by teaching staff, it is often because they were not adequately trained and prepared for the coming changes. Training will make the faculty and students to feel confident and comfortable to embrace blended learning approaches. The library can adequately prepare students and faculty members through innovative formal or informal training platforms. Such training platforms will be used to create awareness and equip them with adequate skills required for the blended learning environment.

**Provision of Resources:** the library should ensure acquisition provision of digital learning resources such as e---books, e---journals, databases, repositories (ifijeh et al 2018) e.t.c. the resources should meet the needs of faculty and students alike. There should be known and accessible links to content of libraries e-resources.

**Collaboration with Faculty.** For effective blended learning environment, librarians, faculty and information technology staff need to jointly develop programs that focus on ICT to enhance student learning. Together they can provide and support specialized tools for online learning, software and hardware targeted at learning enrichment. This synergy can further motivate faculty and students to increase patronage of the library and consequently impact learning outcome. (Øvern, 2014).

**Physical and Virtual Library Space:** library facilities and services should support a blended learning environment, the physical space should be flexible to suit different learning styles. Library learning spaces should be collaborative with flexible furniture that can easily be moved around. University libraries need to rethink and redesign their library space to support effective digital learning by students. The virtual resources should be accessible. (Ojennus, & Watts, 2017).

**Essential Skills Requirement:** in order to function effectively and meet up with the rapid technological transformations, it is essential for librarians to develop new skills, knowledge, and ideas. The blended learning environment requires a new set of skills for the librarians.

**Advocacy Lobbying and Negotiation Skills:** these are essential skills when working in an organization like higher institutions where there are other factors competing for resources as well. For effective repositioning of the the position of the library within the institution. Advocacy, lobbying and negotiation skills are crucial. Librarians will need to be able to intelligently lobby for support from management. Those skills are also essential for obtaining permission for professional development opportunities and execute projects/programs that will promote blended learning. (Allison, 2013).

**Web 2.0 skills:** for successful implementation of blended learning environment, librarians should be knowledgeable in the use of Web 2.0 tools as platform for providing course related instruction. With the visibility offered by Web 2.0, librarians can market and deliver library resources/services, reference questions and even video tutorials. The library website should be popular on web 2.0 platforms. It should be accessible and enriched with vital information and links to a wide variety of relevant resources.

**Information Literacy Skills and Digital Literacy Skills:** librarians should have the required skills to incorporate information literacy skills into course work to achieve student learning outcomes. Librarians themselves must strive to be proficient users of instructional technology. Researches have shown that in recent times, students in developing countries are high Technology enthusiasts and are increasingly using ICTs especially mobile devices. However, it is equally important to teach these students how to adopt navigate, and evaluate all forms of digital resources/technologies. (Çapuk & Kara, 2015). As technology evolves, it necessitates the need for librarians to keep with and sharpen their digital literacy skills.

**Interpersonal skills:** this is essential to creating the partnerships and collaboration necessary for a blended learning environment. Librarians need to sync effectively with faculty and other academic professionals in integrating web-based technologies to course work. They should synergize effectively as partners in a team.

## **2.1 Implication of blended learning for libraries and strategies for academic Library support in a blended learning environment**

Libraries' operations today have changed from the manual way of carrying out operations to technologically driven operation systems (Adebayo et al 2018). The effect of this is that libraries are succeeding in giving blended learning a leverage. Blended learning is of benefit to both students and institutions where facilitates improves the outcome of learning, information access, sense of communal, effective use of resources and satisfaction of student [5]. Online/blended learning also increases student commitment with resources and providing students to have control over learning experience, students can assimilate and add to existing knowledge and this will be facilitating effectiveness. According to [5], blended learning enhances the outcomes of learning, flexibility for both students and teachers, improved their independence, thinking, and study skills, it reduces student withdrawal rate, foster a professional learning environment and reduces study time for the students and teachers. To ensure a suitable and strong learning environment, self-motivated and relevant curriculum and instruction are required. [6] described a well-made academic Library should include creativity, innovation, leadership and entrepreneurship. The effective delivery system is what teaching and learning needs. Advances in ICT has changed the style of delivery for both learning and teaching. As online education continues play a vital role in the education system, many issues has been identified. While technologies are fast becoming popular in higher education, lecturers opinion about

online learning are generally negative, and librarians should be more creative in creating the awareness and importance for their immediate environment.

Some strategies for academic Library support in a blended learning environment are:

**Academic Improvement** – Satisfaction, employability and enabling progression as key aspects of the academic journey, student study, educational changes, learning technologies development.

**Academic Growth and Change** – Institutional Partnership, policy, partnerships with colleges and other degrees

**Research and Enterprise** – University research policy, open access to research framework and policy and funder requirements and data management.

**International Focus** –International priorities policy development for university's International centers, students as global citizens, trans-national education, online delivery and blended learning.

**Sustainability** – University plan, students strategy and value for money.

## 2.2 Factors that can enhance or hinder academic libraries intervention in a blended learning environment.

[7] Determined the degree to which institution/library policy, structure and decisions enhance or hinder blended Learning acceptance in educational environment.

Academic libraries interact with new technology, academic assignment, environment, liaising with lecturers and students, lecturer's attitudes and beliefs towards teaching, and opportunities for career and professional development. Assessment of these variables in academic libraries will allow to define policies that will enhance creation of appropriate conditions for library adoption of blended Learning in their teaching and practice.

Categories of factors that can enhance or hinder academic libraries are:

- 1 Technology – A virtual environments and media integration for learning.

[8] Sees importance at other aspects, but technology as the basic ingredient for blended and traditional learning, this is a critical factor for implementing and it will not be neglected. History of blended learning, has to do with different technologies such as computers, television, software's, and other curriculums have been tested with a changing degrees of achievement [9,10,11,12] explains that to start blended course it is important to orientate and inform students on how to use online modules, and this should include digital lessons in the technology environment to cause easy to new learning.

- 2 Didactics - educational, instructional scheme and the role of library

[13] Stipulates that the most frequent mentioned motives for applying blended learning is the possibility of effective and efficient academic practices, thus, online learning sometimes suffers from intellectual overload by making relevant information available

- 3 Outcome of Courses - learning outcomes and satisfaction of learners

Maximum achievement of the outcomes of blended learning approach should be more focused on the outcomes of learning [14, 15]. Blended learning strategy ought to begin with identifying the outcomes of learning [16, 15]. Teamwork and group existence will be elaborated in the fourth category.

- 4 Presence of Collaboration and Communal

The importance of the teacher to student and that of student to student collaborations during learning shows that online learning only is unlikely to be most effective teaching and learning scheme. [17] Explained students of high opinions of group learning practice and perceive high social presence. Emotional support neglected is an important factor that can help student's sense of distance in technology environment of learning to reduce.

- 5 Course design

The central group is considered and combined to be the most serious factors of all other groups. This group must include the relevant multimodal skill didactics that will support teamwork and make learning active for success in the outcomes of courses. It is therefore recommended that the use of synchronous and asynchronous activities combined, in

application of the styles and publicities to assure the quality of learning within the higher education. This factor relates to student's opinions of group learning, social existence, and satisfaction of their career [17, 15] explained that in blended learning, the course design is to connect traditional and technological components meaningfully to ensure they flow from one medium to another, provided that student's do not diverse their paths via the course content.

#### 6 Synchronicity and Asynchronicity

Blending synchronous and asynchronous features effectively will help build self-confidence and support for the student's interaction [18]. [19] postulate a sense of balance between traditional activities and technology enhanced asynchronous online activities. The relations among students and teachers which is the traditional synchronous interface will be carried into the asynchronous online education and this will make the students feel confident in their virtual engagement and activities (Garner & Rouser, 2016).

#### 7 Heritage from technology improved distance courses

Though, blended learning is seen as the concept that complements and preserves the key issues in technology enhance distance courses, some are factors inherited from only virtual education. Complexity, originality and technological support matters in all forms of online enhanced learning [20].

#### 8 Multimodal overload

Researches have indicated that students are socially engaged and are contented with learning with an active and communicating technology formats. Also asynchronous thoughts will facilitates interacts, and involves valuable resources in forms of media files [21]. Alternatively, capable multimodal blend is to include game learning this will be aimed at as a shared knowledge and student communication [22]. Strategically, it is intelligent for libraries to emphasis on multimodal scopes in the redesigning of the blended learning environment, if the course content will also attract the younger age group [15, 8].

Though studies reject the idea of the styles of learning, students are of different background and have different needs and also different studying methods. It is therefore recommended that multiple paths through the course content be presented to the students, and also via a various types of media, to improve and build their knowledge [15].

#### 9 Trends and hypes

Like the other models of blended learning, trend and hypes seem to be the blended learning that initiates the ways to improve traditional learning. Now, the use the blended learning is to balance technological learning with traditional learning [19]. The strongest hypes seem to be Massive open online courses (MOOCs) and the model of Flipped Classroom. The view of the author was a positive response on the implementation of the flipped classroom [23, 24]. Once the concepts involved are worth more than adding pre-recorded videos.

#### 10 Economy

Several reasons for applying blended learning and cost effectiveness has always been a major goal in education as well as in libraries [25]. The early understanding of technology supported learning was a simple way of making money has later been challenged by low completion rates, high starting costs for preparing content and extensive costs for system preservation [26, 8].

### 3 RECOMMENDATIONS

The challenges notwithstanding, more efforts need to go into the improvement of quality and efficiency of higher education in the developing countries. Addressing the problem of funding is fundamental to the successful implementation of blended learning n higher education. Government should ensure that quality of higher education improves by increasing funding for university education and research so as to spur economic development. Librarians need to make efforts in soliciting alternative funding for facilities, infrastructure, training as well as research.

If libraries are to remain viable on our campuses, we must reaffirm our place as learning centers for the exploration, and sharing of information, and the blended librarian is key to making this successful. Librarians must be flexible and be able to adequately harness ICT (Information and Communication Technology). They must be intentional about improving their knowledge and skills to keep up with

rapid changes in ICT. The Library must work in collaboration with faculty for effective blended learning. Synergies Between.

It is pertinent for library schools to redesign the LIS curriculum to embrace emerging demands for digital literacy and basics of pedagogy. This will ensure that graduates at all levels are well-groomed for participating in the blended learning environment. LIS, MLS and PhD students should have option of specializing /majoring in instructional technology.

Finally, developing countries need to harness the advantages of blended learning to improve the quality of learning and teaching, enhance access to quality content and improve student outcomes

#### 4 CONCLUSION

Having established that there is increasing awareness and interest in blended learning in developing countries, implementation in learning and teaching practices still leaves much to be desired. Implementing blended learning in higher education of developing countries is very crucial to successful student outcome. Blended learning is another innovative way for libraries and librarians in developing countries to make immense contribution in the knowledge era by supporting knowledge gathering, creation and dissemination using new technology-based tools. With the right skills, librarians in developing countries can be equipped to join their counterparts in other developed climes to play a significant and principal role in the ever dynamic sophisticated learning environment. The ability of students from developing countries to develop the skills required for the twenty-first century and confidently face the future will depend on many factors especially a successfully blended learning environment.

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