

Gaps in the Implementation of Blended Education in Higher Learning Institutions in Zambia

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ABSTRACT : The paper problematizes the major gaps higher learning institutions in Zambia face during the implementation of blended learning. A qualitative approach and document review methodology were used to collect and analyze information. Technological, Pedagogical, and Content Knowledge (TPACK) theory, Diffusion of Innovation Theory, and the Community of Inquiry (CoI) model were used to underpin the study. The documents on blended learning in general and Zambia, in particular, were reviewed to arrive at the prevailing gaps. The study reveals the following gaps in the implementation of blended learning in higher learning institutions in Zambia: lack of capacity building to enable stakeholders to handle blended teaching and learning efficiently and effectively, lack of capacity (manpower) to foster blended education, lack of infrastructure and equipment, insecurity of information communication technology (ICT) systems, high cost of running blended learning such as ICT charges, and lack of national policy on blended learning. The study recommends complete support of blended education by higher learning institutions backed by the Higher Education Authority.

Keywords- Blended learning, delivery modes, gaps, higher learning institutions, Zambia

1. INTRODUCTION

According to Grahman (2006), blended education which is also called hybrid or mixed-mode learning has gained considerable attention in recent years as a mode of teaching and learning that combines online and face-to-face instruction. It is envisaged that blended education is a flexible approach to education that allows for personalized learning experiences, promotes active engagement, and enhances student outcomes (Garrison and Kanuka, 2004). The concept of blended learning is derived from two words, blend and learning. The literature describes blended learning as the conceptualization of new knowledge and skills or a particular phenomenon (Choy and Quek, 2022; Olivier, 2011; Rakoczi, 2022). This shows that blended learning combines the advantages of online learning and conventional classrooms. It can be argued that merely combining online learning and conventional classroom might not fulfill students' needs, and could lead to unexpected failure. Therefore, blended learning can be described as a situation that allows students to be engaged in learning outside the classroom environment. It is worth noting that blended learning in higher learning institutions can be achieved by interacting with synchronous tools such as web conferencing, Skype, and group chats, and asynchronous tools that include discussion boards, blogs, and social networking sites (Pomykalski, 2022; Yao, 2022).

Needless to say, blended education in Zambia is increasingly being adopted by higher learning institutions as a way to provide quality education while accommodating the diverse needs of students. However, despite the

potential benefits of blended education in higher learning institutions in Zambia, some gaps affect its effective implementation. Blended learning should be viewed as the best alternative to physical learning if the country or world is faced with a calamity like Covid-19. This shows that, amid a deadly pandemic that does not allow physical learning to be conducted, the education programs must continue running effectively. This entails that the higher education system must embrace blended education. To fully embrace this education, there is a need to address these challenges if the benefits of blended education are to be appreciated and recorded in higher learning institutions in Zambia.

With the above background in mind, the paper problematizes the gaps in blended education in higher learning institutions in Zambia which may result in unequal learning opportunities and challenges, low student engagement, and limited effectiveness of blended education as a transformative pedagogical approach. The study explores how the identified gaps can impede the attainment of national development goals and the global agenda of lifelong learning.

2. OBJECTIVES

The research objectives include:

- i. To identify the key gaps in the implementation of blended education in higher learning institutions in Zambia; and
- ii. To recommend some strategies and solutions for addressing the identified gaps in the implementation of blended education in higher learning institutions in Zambia.

3. LITERATURE REVIEW

Blended education is a relatively new concept in Zambia, and there is limited research on its implementation in higher learning institutions. As noted by Singh and Thurab-Nkholi (2021), "the implementation of blended education in higher learning institutions requires significant investments in technology, infrastructure, and human resources, which may pose challenges in resource-limited settings such as Zambia." There is a need for higher learning institutions in Zambia not only to invest in technology and infrastructure but also in academicians who should implement blended education. Many higher learning institutions do not have the necessary equipment, such as computers and reliable internet connectivity, to support online learning (Mweetwa, 2019). The lack of infrastructural development in higher learning institutions in Zambia hinders the effective delivery of blended education, especially in rural areas where access to technology is limited.

Literature shows that there are three categories of the lecturers' attitudes towards the implementation of the blended-learning model at the Law Department of Sekolah Tinggi Ilmu Hukum Biak - Papua (Irianto et al., 2022). The scholars note that the categories of lecturers implementing blended learning included highly supportive lecturers on blended learning, moderately supportive lecturers on blended learning as well as lowly supportive lecturers on blended learning. Based on this study, it can be argued that having three categories of lecturers who support blended learning is a serious gap in the implementation of blended education in higher learning institutions. This shows that the three categories are likely not to agree with the policies of blended education at the same time, a situation that might negatively affect the implementation of blended learning in higher learning institutions globally and in Africa in general, and Zambia in particular.

Mulenga (2020) argues that many faculty members and students are not familiar with online learning platforms, and they require training on how to use them effectively. This shows that blended education in higher learning institutions in Zambia lacks training for faculty and students on how to use online learning platforms. Without proper training, faculty members cannot design and deliver effective online content, and students may not fully engage with the online material. It is noteworthy that implementers of blended education should be a priority to propel the required implementation of the education system in higher learning institutions in Zambia. It must be pointed out that most of the academics who are in higher learning institutions globally, and in Zambia in particular were born before computers (BBC) were introduced or invented. Therefore, this calls for equipping these academics with the necessary skills for blended learning to succeed.

Akakandelwa et al. (2020) argue that despite the increasing adoption of blended education in higher learning institutions in Zambia, there are still challenges and gaps in its implementation. Challenges include inadequate infrastructure, limited technical support for students and faculty members, and lack of training for faculty to design and implement effective blended learning courses. The above literature correlates with Chilongo and Manda (2021) who outline that inadequate training and support for both faculty and students, lack of access to reliable internet connectivity and devices, and the absence of policies and guidelines to regulate blended education are some of the challenges which hinder the successful implementation of blended education in higher learning institutions. The above challenges require attention if blended education is to score the desired success in higher learning institutions.

In addition, Chisanga (2016) observes that some students may face challenges accessing online materials due to limited internet connectivity and access to devices such as computers and smartphones. When not checked, the above challenges have an adverse impact to affect the teaching and learning using a blended education system. Therefore, the identified gaps that hinder the successful implementation of blended education need to be addressed to avoid the negative effects on students' learning experiences.

The above-reviewed literature demonstrates that blended education has been accepted in higher learning institutions globally, and Zambian in particular, but has some challenges that need attention for its successful implementation. Therefore, this literature is insightful and foregrounds the present discussion on the gaps that hinder the effective implementation of blended learning in the higher institutions of learning in Zambia.

4. THEORETICAL FRAMEWORK

This study adopts three theories to underpin the qualitative, descriptive, and document analysis study. The theories are the Technological, Pedagogical, and Content Knowledge (TPACK) framework, the Diffusion of Innovation Theory, and the Community of Inquiry (CoI). The above theoretical locale has been used to underpin the analysis of gaps in the implementation of blended education in higher learning institutions in Zambia.

4.1 Technological, Pedagogical, and Content Knowledge (TPACK) framework

Mishra and Koehler (2006) emphasize the importance of the integration of technology, pedagogy, and content knowledge in effective teaching and learning. The TPACK framework is helpful during the identification of gaps in the implementation of blended education in terms of lack of technological knowledge and skills among educators, inadequate pedagogical approaches, and insufficient content coverage in the online components of blended courses (Kapenda et al., 2019). The researchers are cognizant that the three components discussed under the TPACK theoretical locale are cardinal if higher learning institutions are to see meaningful implementation of blended education. The theory emphasizes the acquisition of correct technology, teaching, and learning methodologies that favor blended learning as well as modalities that should be used to provide adequate content coverage to students. Therefore, TPACK theory is concerned with equipping both academics and learners with technological knowledge and skills that should be used to implement blended education.

4.2 Diffusion of Innovation Theory

The theory suggests that there may be resistance to change among educators, limited resources, and a lack of institutional support, which can hinder the adoption and implementation of blended education (Ndhlovu, 2018). This is a common trend in most higher learning institutions where financial standing is considered paramount at the expense of learning. Management of higher learning institutions in Zambia should consider the above factors for the successful implementation of blended education. Therefore, this theory will guide the analysis of situations where higher learning institutions have been expressing resistance to the implementation of blended learning, a situation the Higher Education Authority (HEA) of Zambia must address. Institutions that manifest resistance must be guided and helped by HEA to bridge the existing gaps and achieve a successful implementation of blended learning in Zambia.

4.3 Community of Inquiry (CoI) Model

Garrison et al, (2000) use the theory to describe the elements of successful online learning environments, which include; social presence, cognitive presence, and teaching presence. The CoI model is helpful during the identification of gaps in the implementation of blended education, such as lack of social interaction and

engagement among students and educators, inadequate support for cognitive development, and insufficient teaching presence in the online components of blended courses (Kapenda et al., 2019).

5. METHODOLOGY

The study adopted a qualitative approach whose objectives are usually descriptive and holistic (Creswell, 2012; Mutch, 2005; Flick, 2014). The research was a desktop study that employed the document analysis method. The document analysis method is the application of secondary data to justify the given objectives (Chaleunvong, 2009). A systematic search of online databases such as Google Scholar, EBSCOhost, JSTOR, and ProQuest was conducted to identify relevant literature on blended education in higher learning institutions in Zambia. The search included articles, reports, and books published in the last ten years. Literature was screened based on its relevance, quality, and reliability. Only sources that provided insights into the gaps in the implementation of blended education in higher learning institutions in Zambia were selected for analysis. It is noteworthy that data collection went hand in hand with data analysis (Mugenda and Mugenda, 1999). The selected data were extracted, organized into themes, and synthesized to provide a comprehensive overview of the gaps in the implementation of blended education in higher learning institutions. Data were analyzed thematically using descriptive and analytical skills.

6. FINDINGS AND DISCUSSION

The implementation of blended education in higher learning institutions in Zambia has faced several challenges, leading to significant gaps that need to be addressed (Chinyemba, 2018). From the reviewed literature, five key themes emerged on the gaps in the implementation which are presented in the subsequent sub-sections.

6.1 Lack of adequate infrastructure

Lack of adequate and standard infrastructure suitable for conducting blended education is among the most serious gaps in higher learning institutions in Zambia that affect blended learning. The study reveals that the implementation of blended education in Zambia's higher learning institutions also lacks adequate technological support. This challenge has been exacerbated by the limited access to electricity and the internet in some parts of the country, which affects the delivery of online learning. In addition, some students lack the necessary devices and skills to access and use online learning platforms effectively (Muyinda and Lubega, 2017).

6.2 Inadequate training of educators and students

The study reveals that higher learning institutions, that is, colleges and universities in Zambia have inadequate training for educators and students on how to use blended education effectively. Some educators lack the skills and knowledge necessary to design and deliver online learning, leading to a gap in the quality of education offered. Students also lack the motivation and discipline required to learn online independently, leading to poor academic performance (Siame and Simuciko, 2019). The above literature shows that there is a lack of technical expertise and support for implementing blended education in higher learning institutions in Zambia. This gap is attributed to a lack of funding to support the purchase of necessary technology equipment. It can be argued that funding is among the most serious gaps which also hinders the educators and learners in higher learning institutions in Zambia from receiving the required technological training to match the generational needs of blended learning.

6.3 Lack of clear policies and guidelines

The study reveals that higher learning institutions in Zambia do not have established policies and guidelines to promote teaching and learning through blended education. Literature shows that the implementation of blended education in Zambia's higher learning institutions has been hindered by a lack of clear policies and guidelines on the use of online learning platforms. This has resulted in inconsistency in the delivery of blended education. This gap leads to confusion among students and trainers in the implementation of blended education regarding the appropriate use of online learning and resources (Chinyemba, 2018). Higher Education Authority should come on board and guide higher learning institutions on the policies to follow or apply when implementing blended education.

6.4 High cost of running blended learning

The challenge of the high cost of running blended education relates to the financial capacity of higher learning institutions in Zambia. The study shows that higher learning institutions have financial constraints to meet the required costs of blended education. Studies have shown that blended education comes with internet connectivity. High internet costs hinder the effective delivery of online learning (Chilongo and Manda, 2021). Muyinda and Lubega (2017) argue that some students lack the necessary devices and skills to access and use online learning platforms effectively. These devices are in the form of computers and smartphones. There is a need for higher learning institutions to empower students with the necessary devices. To bridge this gap, the government of the Republic of Zambia should prioritize giving loans to students in higher learning institutions in the form of computers and smartphones which should be payable in installments for a certain period when such students are deployed.

6.5 Insecurity of Information Communication Technology (ICT) Systems

This challenge is associated with criminal activities regarding internet services. Cybercrimes are prominent, hence the security of sensitive materials such as financial records and academic results is at high risk by those who hack internet systems. Higher Education Authority should come on board to ensure that higher learning institutions in Zambia intensify the security systems of universities and colleges (Singh and Thurab-Nkholi, 2021). The study reveals that both educators and learners in higher learning institutions lack the technical know-how that should help to disseminate and safeguard the information. Therefore, there is a need for higher education to invest heavily in the security of information communication technology to prevent cybercrimes during blended education.

7. CONCLUSION AND RECOMMENDATIONS

The study has presented the most serious gaps which hinder the effective implementation of blended education in Zambia. To address the discussed gaps, there is a need for increased investment in infrastructure and technological support, including the provision of reliable electricity, internet access, and devices such as laptops and tablets to students who are in need.

There is a need for teacher training programs to equip educators with the necessary skills and knowledge to design and deliver online learning effectively. Students should also be trained on how to use online learning platforms effectively. There is a need for clear policies and guidelines on the use of online learning platforms to ensure consistency and quality in the delivery of blended education. Addressing gaps discussed in this paper requires concerted efforts from stakeholders, who include; the government, educational institutions, and private sector players. The above stakeholders should ensure that blended education is implemented effectively and efficiently.

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