AN INVESTIGATION INTO BARRIERS IMPACTING AGAINST FACULTY BLENDED LEARNING ADOPTION

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ABSTRACT

Blended Learning has not attained campus-wide integration and adoption as the preferred teaching delivery mode by faculty members a few years after the management of a public university in Ghana decided to move from face to face delivery to the blended mode. This study investigates the barriers impacting faculty Blended Learning in Ghana. The study uses an exploratory qualitative approach to investigate the barriers to faculty non-adoption of blended learning. It also investigates their perceptions and experiences. A total of 22 faculty members from four faculties of the university were purposively selected and interviewed for this study. The data were coded and analyzed using a constant comparative analytical method. Thematic analysis was then applied to generate themes for the findings. The study found four themes that inductively constitute barriers to faculty BL adoption. These are infrastructure, faculty concerns, institutional, technical support barriers. The study provides insights into the lived experiences of faculty members relative to the impediments they face in adopting BL. Thus, administrative managers need to avert their attention to institutional related barriers, faculty related concerns, technical barriers, and infrastructure-related barriers when implementing BL.

Keywords: Blended Learning, faculty adoption, thematic analysis, adoption barriers, developing country.

INTRODUCTION

Over the past decade, universities have embraced Blended Learning (BL) as their preferred delivery approach (Bokolo et al., 2020). BL involves the combination of two distinctive delivery approaches, that is face-to-face and online learning to harness the best of the two approaches to create unique learning experiences for students (Friesen, 2012). The benefits for adopting BL are well documented and include, improving students learning outcomes (Chen & Tat Yao, 2016), personalization of learning for students (Eom & Ashill, 2016), reducing administrative cost (Jobst, 2016) and enhancing students interaction with faculty (Lee, Srinivasan, Trail, Lewis, & Lopez, 2011). There is evidence that students prefer to be taught in BL mode (Jobst, 2016). Previous studies (Lin, 2018) have outlined the advantages of BL.

Over the past decade, there has been a steady stream of studies suggesting that the landscape of HEI (Higher Education Institution) is changing (Dziuban, Graham, Moskal, Norberg, & Sicilia, 2018). HEIs have been called upon to respond more appropriately by making the investment that would embrace and fully integrate technology into the curriculum. Whiles some universities have been successful at this, studies on BL adoption suggest that the adoption rate is very low (O'Connor, Mortimer, and Bond, 2011). More recently, the digitalization of societies, with its attendant effect on academic work, has exposed the weak institutional attempts at integrating BL into the teaching and learning curriculum. At no point has there been a more compelling reason for HEIs to shift from face-to-face teaching to Blended Learning (BL) other than now. If there is ever a time for BL to gain mainstream attention, then it is now because it has the potential to transform the modern academy.

Studies have found faculty not using of BL for teaching and learning as one of the reasons accounting for the low adoption (Mtembe and Raisamo, 2014; Cunningham, 2016). The important role faculty plays if BL is to be institutionalized is well documented (Benson, Anderson, and Ooms, 2011). It has been argued that faculty members are very important in the sense that they must make the conscious decision to teach in BL mode (Teo, 2011). Therefore, understanding what factors influence their decisions to adopt BL for teaching has been a subject of critical research (Benson et al., 2011). Studies by Ali, Buruga, and Habibu (2019) suggest that the shift from face to face to BL mode comes with a lot of difficulties and challenges for many faculty members. Faculty members' technological efficacy and inadequate institutional infrastructure that supports BL implementation programs have been identified as barriers that militate against faculty members adopting BL (Previtali & Scarozza, 2019).

There is ample scholarship investigating barriers to faculty BL adoption (Liu and Tourtellott, 2011; Porter, Graham, Bodily, and Sandberg, 2016). Mostly, these have viewed the issues from the perspective of faculty members coming from developed country contexts. There is scant research focusing on faculty BL from developing countries such as Ghana. Thus, this study investigates barriers to faculty BL adoption by using a public university in Ghana as a case study. The case study university has since 2013 been implementing BL when the management of the university took a policy decision to move from face-to-face delivery to a fully integrated BL university by 2021. Unfortunately, faculty members have not adopted BL and continue to teach in the traditional mode after significant investment was made in infrastructure and training. This study investigates the underlying reasons for this by asking the research question: why are faculty members not adopting BL for teaching and learning?

The paper proceeds in section 2 by presenting a literature review on BL adoption. It provides a contextual definition of BL, reviews faculty BL adoption experiences and barriers to BL adoption. The methodology adopted for the study is described in section 3. The results, discussions and conclusions are presented in section 4, 5 and 6, respectively.

LITERATURE REVIEW

There is a plethora of definitions for BL and this is mainly so because of the different models and blends available (Zhang and Zhu, 2016). BL is defined as "combination of face-to-face and online delivery methods, with the aim of each complementing the other" (Poon, 2013). Verkroost, et al., (2008) hold the view that this is a narrow definition of what BL is since it assumes that the whole essence of the blend is to replace old media without due regard to the fact that it involves a redesign of the learning process using technology. In that regard, they define BL as "The total mix of pedagogical methods, using a combination of different learning strategies, both with and without the use of technology"(Verkroost et al., 2008). Alammary, Sheard, and Carbone, (2016) criticize this definition indicating that without thoughtfully integrating the pedagogy into a well-balanced combination between the two delivery approaches (face to face and online), (Verkroost et al., 2008) definition could easily be misconstrued as either a purely distance course or a face to face course. For this study, BL is defined as the combination of face-to-face and online delivery through a thoughtful and deliberate process that harnesses the utility of technology such as learning management systems to provide learning resources to students beyond the classroom to stimulate student learning and improve learning outcomes (Friesen, 2012 ; Caner, 2016; Dziuban et al., 2018). This definition finds expression and agreement with the BL policy of the case study university.

There is a lot of scholarship exploring what influences faculty members to adopt BL (Baltaci-Goktalay and Akif Ocak, 2006). Teo (2011) examined factors that influenced teachers' intention to use technology. The result of his study was a model that was developed and tested. Teo's (2011) model found that teachers adopt technology when they perceive adequate support from management be it technical support that is timely and when they perceive that the technology is free from effort. From the results, "perceived usefulness, attitude towards use, and facilitating conditions were found to have direct influences on behavioural intention to use technology" (Teo, 2011). The adoption of BL by faculty has been reported to be a complex and challenging one (Benson et al., 2011; Fathema and Leigh Sutton, 2013; Radif, Fan, and Mclaughln, 2015). In a study conducted by (Fathema and Leigh Sutton, 2013), the authors investigated why faculty members in a South-eastern university in the United States of America were under utilizing the LMS (Learning Management

Systems). Their study found that system challenges and design flaws accounted for the faculty members' resistance to adopt the technology. In a similar study, Ocak (2011) investigated why faculty members were not adopting BL for teaching and learning. He found and grouped the challenges the faculty faced into three, namely- instructional, technical and community concerns. Instructional wise, (Ocak, 2011) suggests that faculty members find the instructional process relative to course design too complex and also find student and faculty communication and interaction as ineffective, thus leading to their rejection of BL.

Asunka (2013) investigated the perspectives and barriers impacting faculty BL in a private university in Ghana. The author adopted a qualitative research design and interviewed 74 faculty members. The findings of the study indicate that faculty members hold a positive view of BL. However, the barriers found in the study included a lack of institutional support by way of top management commitment to the BL implementation process. Also, low IT skills needed to teach using technology was found to be a major barrier to facilitating instruction in a blended mode. Additionally, faculty members expressed concerns about the extra workload that was involved in designing courses and modules to teach in the blended mode, and the lack of incentives and rewards for faculty members as demotivating factors and reasons for their rejection of BL. The author concludes with the suggestion that these barriers can be overcome through participatory activities that collectively identify their concerns and address their challenges. Similar studies by Gregory and Lodge (2015) also suggest that academic workload and the lack of an effective workload management compensation scheme remains a silent barrier against faculty BL adoption in universities.

Blankson (2015) carried out a study in the University of Cape coast in Ghana by investigating the perceptions of academic staff towards BL and the barriers impacting their adoption thereof. The study found that factors such as the lack of regular electric power supply on campus and the level of computer and Internet skills hinder faculty effort to adopt BL for teaching and learning. The study concludes that BL adoption is still at an infant stage and suggested that it behoved on management to provide the required support services if faculty members were to adopt BL.

The literature on faculty BL adoption suggests that technological, faculty concerns and institutional impediments account for some of the reasons why faculty are apprehensive in teaching in BL mode. The studies available that contribute to understanding faculty BL are mainly from universities from developed countries. This study attempts to fill the gap by contributing to the research base with evidence from a developing country context.

METHODOLOGY

The case study was a public university with multi-campuses across five regions in Ghana. The university has 265 teaching staff and over 8,075 students. The university is uniquely positioned and offers bachelor's and post graduate degree programs serving not only the Ghanaian market but the West African sub-region and beyond. Pursuant to a management decision, a BL policy was developed in 2013 to adopt BL as a delivery approach with the objective to transition from face-to-face to a fully blended institution by 2021. Accordingly, the Centre for Online Learning and Teaching was established to train faculty members in instructional technology delivery methods to equip them with the skills required to integrate technology into their teaching methods. A Moodle Learning Management System (LMS) was also procured. Various BL models were applied, but basically, faculty members were required to upload their course and teaching materials, videos, and other media on to Moodle. The delivery was structured to accommodate face to face and online delivery. On days where there were no in-class delivery faculty members held classes online by leading discussions on the LMS platforms.

Research Design

An exploratory case study approach set out to inductively investigate a phenomenon within a social context without any a priori theoretical formulations was adopted. The study adopted a qualitative case study methodology with faculty members as the unit of inquiry to investigate the barriers impacting against BL adoption (Martins and Baptista Nunes, 2016).

Participants

The help of program managers was requested for the selection of research participants. The selected participants were drawn from a population of 55 lecturers who had been trained and certified to teach in the BL mode by the university. In all, 22 academics who use the LMS to teach in the blended mode were purposively sampled for the study. These purposively sampled academics were selected from the four faculties of the university namely the graduate school, faculty of I.T business, and the Faculty of engineering and Faculty of Computing and Information Systems. The perspective of these participants relative to the impediments they faced or continue to face when teaching BL courses was explored.

Data Collection Instruments

The main instrument for data collection for this study was the face to face interview. The researcher adopted Kvale (2011) as a guide for the interviews. This helped in providing guidance as to how to balance the researcher-interview power structure. It also shaped the researcher's understanding to look out for non-verbal cues that was worth noting during the interview sessions for further probing. An interview protocol was developed to elicit responses from the participants (see appendix 1). The interview protocol was emailed to the participants to enable them to familiarize themselves before hand with the questions to be asked before the interview session. The semi-structured questions were focused on understanding the impediments encountered by the lectures as they adopted BL for teaching and learning in the university. The questions were flexible to allow room for follow up and clarification of answers where necessary. Each interview session lasted between thirty-five minutes to one hour and was carried out in the comfort of the offices of the lecturers from October 2018 to December 2018. Prior to the interview sessions, permission was requested and subsequently granted to record the interviews on a portable audio recorder. This ensured that the views of the participants were captured to subsequently aid in the accurate transcription of the record during data analysis.

Data Analysis

The interview data were analysed using the constant comparative analytical method. Data analysis was in two parts. First, the recorded interviews were played over and listened to by the researcher. Through this, the researcher immersed himself in the data. In the process, deep insights, and conceptual understanding of what the data was saying was gained. The interviews were then transcribed and emailed to the participants to check for any inaccuracies that might have been captured or attributed to them and to allow them to make corrections. The transcripts were stored in file folders in NVIVO and analysed.

The second part involved the actual analysis using the constant comparative analytical technique which required that the textual data be broken into unique codes and analysed for themes. The transcripts were read line by line and where some thought processes of the respondents came across answering the research objective, they were assigned codes. These codes represented unique identifiers that vividly captured the thought processes in a phrase or word (designated as a code). In all, over 82 codes were generated from the transcripts. The unique codes were then regrouped into axial codes and selective codes. These codes representing varying meanings from the respondents were individually compared to each other, and those with the same meaning were grouped together. Groups of similar codes that were compared and grouped together this way were abstracted and re-grouped into sub-categories and categories. This process of open coding, creating categories and abstraction was facilitated using the NVIVO software.

The researcher ensured that his role in the research was minimal by approaching the research data with an objective mind. To deal with bias and ensure trustworthiness and reliability of the data, a second coder was recruited. For purposes of ensuring intra-coder reliability five of the transcribed transcripts were sent to another researcher independent of the research to recode and generate themes and categories. The external coder was selected based on his experiences and familiarity with qualitative and BL research. The external coder returned his results after two weeks and a meeting to discuss the outcome was held. A calculation of Cohen's Kappa was done to check for intra-coder reliability. According to Fraenkel and Wallen (2000) Kappa values greater than .70 are considered good evidence of agreement. In this paper instance, the Kappa's for both the first and second coders were .73 and .74 respectively indicating a satisfactory fit-for-reliability agreement. Where there were marked deviations in codes and outcomes, they were discussed and realigned to meet the study objectives.

FINDINGS

To arrive at these outcomes, the data were analysed looking for insights into what constituted barriers to faculty BL adoption. The study found four themes that inductively constitute barriers to faculty BL adoption. These are, institutional related barriers, faculty related concerns, technical barriers, and infrastructure-related barriers, respectively. Deriving from the above, the study found that the faculty members that were interviewed understand what BL is and the promise it holds. However, the challenges acts as demotivators as they seek to transition from their current delivery approach to becoming BL teachers.

Coding Categories

This sub-section summarizes the four inductive themes and presents the barriers of faculty adoption. Of the following main barrier categories, each of them had sub-categories of underlying factors that constituted impediments towards BL adoption. For example, the following sub-categories emerged from the institutional barrier themes: wrong approach to faculty training, uncoordinated strategies, poor implementation, policy incoherence, inadequate resource allocation, lack of stakeholder engagement and poor change management strategies. In the faculty related concerns, perceived faculty intrinsic demotivators relating to poor faculty attitudes, faculty apathy, faculty reluctance and resistance, Job insecurity, intellectual property and extra workload were found. Similarly, for technical barriers, inadequate orientation to use the system, platform, and usability issues constituted the main barriers in the sub-category. Finally, concerning infrastructure barriers the study found internet connectivity, erratic power supply and infrastructure deficit as the main barriers. Table 1 describes the barriers that were found.

Table 1. Categories and sub-categories of barriers to faculty blended learning adoption

Sub-category	Category	Themes
The wrong approach to faculty training uncoordinated adoption strategies Human resource issues poor implementation strategies policy incoherence Inadequate resource allocation Lack of stakeholder consultation Poor change management strategy	Management, policy, and implementation gaps	Institutional barriers
Poor faculty attitudes Faculty apathy Faculty reluctance and resistance Job insecurity Intellectual property extra workload	Perceived faculty Intrinsic demotivators	Faculty barriers
Inadequate instructional expertise Technological competence deficit Lack of Pre-requisite competence	Inherent faculty inadequacies	
Platform and system usability challenges inadequate orientation to use system Lack of technical support	Platform challenges	Technical support barriers
Inadequate campus computer labs for students unstable internet connectivity erratic campus power supply	Infrastructure deficit	Infrastructure barriers
unstable campus internet connectivity Inadequate internet bandwidth	Internet challenges	

Field work, Authors construct, (2020)

Institutional Barriers

These are barriers that are inherent in the institutional set up which relate specifically to management responsibility, institutional policies and how these policies are translated into action and implemented. The study found that faculty members' rejection or refusal to teach in BL is directly related to these institutional barriers. For example, many of the respondents were oblivious of any institutional BL policy. The few who indicated they knew of any such policy remarked that it was something they had heard of in passing or during meetings that they attended. Again, on the issue of policy, it became evident that a document of such nature had been conceived but because it was not developed in a consultative manner the faculty members had opted to disregard it and go about teaching in the face-to-face mood. The corollary of this was that the BL policy became incoherent and was applied with such lack of coordination that resulted in the apathy faculty displayed towards the whole process. A respondent's view about the BL policy was: *"No it hasn't done so well. There are a lot of reasons for this but chief among them is that the policy was not thought through fully. I think the policy was rushed."*

Secondly, faculty members were of the view that the BL training was carried through using the wrong approach. Many of the respondents indicated that the BL approach was new. More so, it required the faculty members to first be technology competent in order to develop courses and deliver online. However, without any consultation, training of faculty members was announced and facilitators assumed that all faculty

members had a good appreciation of the concepts. The result was that faculty members who had prior BL teaching experience, and those who had foundational understanding of instructional technology teaching methods hijacked the training sessions to the detriment of those with little or low technology competencies. In the end, many faculty members fell out from the training and consequently did not teach using BL. In articulating this view, a respondent indicated thus, '*Training is a challenge because it was not properly done because we were all boxed into the course without any segmentation. So that those who were technology savvy could go into different groups and those who are less inclined to technology are put in a different group*".

Thirdly, faculty members held the view that the implementation process should have been piloted at least starting with early adopters who had experience teaching in the BL mode. By so doing, they could share their stories to other faculty members and provide mentorship to colleagues who needed to be inspired or motivated to move beyond their anxieties for whatever they were to try teaching in BL mode. However, that was not the case since management decided without any form of consultation to announce the implementation of BL. This frustration was eloquently captured by a respondent when she expressed the view that "*I think there was need for a piloting because at the start everyone was pushed onto the system with many of us having no idea how to get online"*

Faculty Barriers

These are barriers that specifically relate to faculty perception of BL and their inherent competency inadequacies that impact on their decisions to teach in BL mode. Faculty members' view of teaching is constructed on the traditional face-to-face mode which thus makes it difficult to embrace BL. Informing these anxieties are the issues of perception, poor attitudes, and apathy towards BL. Faculty must find time to create course content and engage students online. They must read through course material, break them down into presentable online friendly formats and record lecture videos where delivery is asynchronous. Not that alone, for many, this constitutes extra workload especially when they must also conduct research that counts towards their promotions. A participant narrated his experience this way. "*You know yes you have 5-year-old notes and slides that you have always kept, you know and all of a sudden, now you need to break them into certain chunks, look for video somewhere all these are a lot of work for me as a lecturer'.* They were other faculty members who conceded that even though it entailed extra work in the initial course preparation, once done teaching in BL mode was easier because it brought some level of organisation into the teaching process, nonetheless. One summed it up this way, *'The initial work in trying to put the material etc. together and post it is a lot of work but once you finish with that it is very easy going".*

Technical Support Barriers

From the obtained results of the themes on technical support barriers, two groups emerged from the categories (inadequate orientation to use system and Platform and system usability challenges). Some of the respondents found the LMS to be user unfriendly and this was largely due to their lack of technical expertise to navigate the platform and use its functionality to deliver content. The respondents intimated that prior to the adoption of MOODLE there had been several versions of LMS that the university had introduced. Owing to this, faculty members found it too complicated to differentiate between the systems and what their functionalities were. One participant captured it as " *the LMS was not user friendly at all and in most cases, we did not know how to use the features on the platform".* Additionally, there was inadequate orientation given to the faculty members on how to navigate the LMS and use it to deliver content in the most effective way.

Infrastructure Barriers

These reflect the category of barriers relating to issues that deal with I.T. infrastructure and the support needed to run BL courses. Specifically, the faculty members mentioned the issue of irregular, often unstable internet connectivity on campus as a major demotivator towards adopting BL. To put it in perspective, the faculty members' major concern was the lack of a reliable internet network to support the LMS infrastructure by way of ensuring that content servers are hosted for utilization during and after class. Particularly, it was noticed from the respondents that the erratic nature of the internet connection often became pronounced

during synchronous lecture delivery. This occurrence created frustration for both lecturers and students. Instances were mentioned where lectures stalled because of connectivity issues, faculty members could not upload course syllabi and assignments, neither could they interact with their students. A respondent expressed his displeasure thus *'Internet connectivity is horrible'*. This captured the frustrations of the faculty as a significant number of the participants expressed great concerns about the Internet connectivity as being a major challenge towards their adoption of the BL approach. Elaborating further, a respondent surmised that "*So the context was we have to understand the environment so the environment creates challenges or itself is a factor so for example availability of network, internet connectivity to be able to use and go online it's a huge challenge"*

Additionally, a reliable electric power supply is a critical element needed to run BL programs because it is needed to keep internet servers, LMS and computer laboratories running. However, the faculty members bemoaned the unstable and unreliable power supply on campus, which practically makes it difficult if not impossible to engage in any meaningful BL teaching other than the resort to face-to-face delivery. This created apprehension within faculty members since the thought of redesigning courses and reorienting students back to the face-to-face delivery environment to compensate for the challenges presented a feeling of disillusionment for the faculty. Not only did it involve doing extra work but, at the end of the day, it defeats the very purpose of BL which is to create meaningful learning experiences for students rather than frustration and anxieties occasioned by technological glitches within the school environment**. "***Once you don't have the power running the Internet connectivity can also be another hindrance"*

DISCUSSIONS

This study investigated BL adoption from the perspective of faculty members in a public university. The outcome identifies significant barriers impacting against the faculty members use of BL approach for teaching. In the present study, even though the respondents disclosed that they know what BL is and use the University's LMS for the dissemination of course materials and communication, they insisted that they could not engage fully in BL delivery because the enabling environment required to support such a delivery approach was missing. The four themes derived from the analyses that respondents viewed as barriers to adoption relate to institutional, faculty concerns, technical support, and infrastructure. These findings suggest the need to understand both the institutional context where the implementation takes place and individual faculty issues to achieve campus-wide implementation. These findings are consistent with previous research (Buchanan, Sainter, & Saunders, 2013; Tshabalala, Ndeya-Ndereya, & Van Der Merwe, 2014) which indicates that structural barriers within institutions and the perceived usefulness of technology tools remain the barriers to BL adoption in universities

On the individual level, the study finds that faculty intrinsic inadequacies militate against adoption. Faculty intrinsic demotivators such as their lack of competence to teach using technology and poor attitudes towards teaching using technology were found to manifest in behaviors that lead to apathy and resistance.This finding agrees with Birch and Burnett's (2008) study that suggests that personal inhibitors such as resistance to change, fear of loss of autonomy and lack of incentives lead to faculty not adopting BL. For example, even though the respondents have a positive view of BL, their inability to use the school learning management systems to engage students became a barrier for them to teach in BL. Teaching in BL mode requires significant course redesign that faculty need to invest extra time to complete (Garrison and Vaughan, 2008). The extra workload that accompanies redesigning courses constitutes a major disincentive for faculty members towards adopting BL (Wingo, Ivankova, and Moss, 2017). Often, faculty members' expectations are that management finds a way to compensate them for these extra efforts that go into the process. Other studies have suggested that to address these inhibitors, management can reward or incentivize faculty adopters by way of recognition or making teaching using in BL a criterion that counts towards their promotions (Reid, 2014; Benson et al., 2011).

Besides these, many of the respondents had simply developed resistance to the BL initiative because, there was serious faculty opposition to the top-down implementation approach that was adopted by the school management. The respondents held the view that the implementation process was not consultative and engaging enough. Top-down implementation strategies are in themselves not a bad approach but there is the need to engage faculty to get their buy-in so that they own and drive the implementation process (Bohle

Carbonell, Dailey-Hebert, and Gijselaers, 2013). Preferably, a bottom-up implementation approach that is faculty-led is reported to facilitate change (Jobst, 2016). Furthermore, a huge disconnect and lack of clarity as to what the university's BL objective was and what it intended to achieve was reported. This result is consistent with the suggestion that a good blended learning initiative should be guided by institutional policies, plans, and clear implementation strategies as the absence of such policy frameworks results in the rejection of an otherwise far more innovative teaching and learning approach (Sharpe, Greg, and Richard, 2006).Previous research (Garrison and Kanuka, 2004;Porter, Graham, Spring, and Welch, 2014) indicates that where there are policies and top management commitment to the BL the transition towards BL becomes much easier.

As with new technology implementations, there is a need for the essential infrastructure to support the process to be provided. However, we found that there was inadequate infrastructure to support the BL and this contributed to faculty not teaching in BL mode. The two most challenging themes emerging here relate to infrastructure deficit and internet connectivity.

Finally, the study found technical support barriers as one of the reasons they were not teaching in BL mode. Studies by (Ocak, 2011) have found that teachers play dual roles when they teach in BL mode. First in their role as instructors and second they become technical experts who must address any technical challenges that come-with the process Ocak (2011). Not only do they find this overwhelming but the lack of or absence of a dedicated technical support centre by the university that addresses students' as well as faculty needs puts a burden on faculty who aside teaching must help students navigate through LMS platforms and the challenges arising thereof. In this present study, faculty members' background relative to their competence to teach using technology was suspect; thus, there was the expectation to train them in instructional methodologies, provide orientation and demonstration sessions that should prepare them with the effective pedagogic and technology skills implicit for teaching in the BL mode. There is also the need to provide adequate resources, technology and support to stimulate positive attitudes towards adopting new teaching practices (Benson et al., 2011).

CONCLUSIONS

The objective of this study was to investigate the perceptions of faculty members in a public university in Ghana to capture insights into their lived experiences relative to why they were not adopting BL for teaching as had been initiated by the university. The study found the respondents to be fully aware of the BL initiative nonetheless due to certain external and internal barriers they were not engaging students in the BL mode. The study found four themes that inductively constitute barriers to faculty BL adoption. These are infrastructure, faculty concerns, institutional, technical support barriers. The following sub-categories emerged out of the institutional barrier themes, the wrong approach to faculty training, uncoordinated strategies, poor implementation, policy incoherence, inadequate resource allocation, lack of stakeholder engagement and poor change management strategies. In the faculty related concerns, perceived faculty intrinsic demotivators relating to poor faculty attitudes, faculty apathy, faculty reluctance and resistance, Job insecurity, intellectual property and extra workload were found. Similarly, for technical barriers, inadequate orientation to use the system, platform, and usability issues constituted the main barriers in the sub-category. Finally, in relation to infrastructure barriers the study found internet connectivity, erratic power supply and infrastructure deficit as the main barriers.

For university administrators intending to implement BL, these findings present a good starting point to inform the process. Even though these identified barriers are not ranked according to which of them has a major impact, against faculty adoption, it is imperative to assess them and identify solutions to address them. The focus of university managers should be geared towards eliminating these barriers to get faculty buy-in and unleash their creative and adoption potential (Bohle Carbonell et al., 2013). This should involve a change in top management attitude, adopting bottom-up other than top-down BL strategies constituting BL implementation teams, identifying and promoting early adopters to become project champions and share experiences (Bohle Carbonell et al., 2013). Additionally, managers should promote strategies that encourage skills acquisition that are required to implement successful blended- learning environments (Adebayo et al., 2019). Above all, management's commitment to the transition process must be transparent to get all on

board. Thus, administrative managers need to avert their attention to institutional related barriers, faculty related concerns, technical barriers, and infrastructure-related barriers when implementing BL.

As in any educational research, limitation of the study needs mentioning. In the current work, purposive sampling was used in the selection of interview respondents. The likelihood that views expressed by the respondents may not be representative of the entire population exists. Also, given the sample size, it is difficult to know if the outcome is representative enough. Nonetheless, the findings provide a good starting point to understanding the barriers impacting faculty adoption. Another limitation is the context in which the research was carried out. It is to be noted that this research was carried out in a public university in Ghana. Thus, the findings must be appreciated within this context as the definitions of BL, what it means and how it is applied in that context might differ from approaches used in other environments and settings.

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