

SWOT Analysis of Blended MOOC from Ghanaian University Instructors' Perspectives

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Abstract

Through blended Massive Open Online Courses (b-MOOC/bMOOC), universities in the global south can integrate their courses wholly or partially with the global north for free. Despite adopting such a strategic move in higher education, instructors' or tutors' experiences have been rarely explored. The fundamental goal of this research was to ascertain how bMOOC is being used and how it can be incorporated into the on-campus classroom setting to enhance effective teaching and learning in higher educational institutions. The instrument used was mainly online interview question items containing elements of SWOT analysis. A purposively and multi-stage sampling technique was used to select the twenty-five (25) Instructors in the University of Cape Coast (UCC), Ghana who had already used the bMOOC instructional delivery strategy. The result showed that there were available facilitating conditions such as computers, internet access, and ICT laboratories. However, these were inadequate for the sustained and smooth implementation of bMOOC. It was revealed that the university could obtain numerous benefits if bMOOC is implemented appropriately at UCC. These benefits include expanding the distance education program, increasing student enrolment, reducing physical infrastructure costs, and enhancing its public image. It was recommended that before running bMOOC, universities must have and maintain reliable and robust internet connectivity, which should be made accessible to all users. Finally, the universities must make provisions for adequate ICT laboratories.

Keywords: Higher Education, Instructional Delivery Strategy, Universities, SWOT, MOOC

Introduction

The rapid migration of traditional learning to online learning has gained momentum in recent times, making technology evident in higher education institutions. The "COVID-19" pandemic also led most universities in the global south who were late adopters of e-learning to engage their students online (World Bank, 2020).

Through the platforms provided for massive open online courses (MOOC), universities and their students are now able to access content from “top-notch” universities, who have opened their courses to the outside world, free of charge except the cost of the internet connectivity. MOOC continues to gain momentum and prominence among the mainstream academic institutions at all levels; primary, secondary and tertiary. The world is moving towards open education, of which MOOC is a modern layer of educational potential that provides a technique for creative learning. With MOOC, institutes, instructors, and students globally have a common platform to share their views and work in teams. As a web-based platform, it also provides an unlimited number of students globally with opportunities for distance education with the best institutes of the globe (Smriti & Kumar, 2021). Haron and Hafidzan (2021), investigating the acceptance of MOOC and factors that might influence the use of MOOC at Public Universities, revealed that performance expectancy, effort expectancy, social influence and facilitating condition are factors influencing MOOC usage among students. The findings also showed that the acceptance level of MOOC learning at universities was substantial due to factors influencing the usage and encouragement of these technologies. Above all, there is an area of improvement in MOOC learning at these universities to make the technologies more useful. MOOCs have the potential in order to expand learning options by providing a wide range of choices in different areas and disciplines for a more significant number of participants (Liyanagunawardena, Adams, & Williams, 2013). The MOOC phenomenon has challenged established notions and prompted educational institutions to re-examine their current missions (Daniel, 2012). It has even been suggested that every institution needs a MOOC plan and strategy (Marshall, 2018).

One way of using MOOC in universities is through bMOOC – a combination of classroom activities with contents from MOOC platforms such as Alison, Coursera, Edx, FutureLearn, Saylor, and the likes. That is, bMOOC is to complement campus-based courses with MOOCs. Two types of bMOOC exist, which are:

1. Universities create MOOCs and later ask their students to enrol in and use the MOOCs in-place

of campus course they are to register. Students then transfer their credits from the MOOCs to that of the on-campus-based courses.

2. Universities borrow or use other universities’ MOOCs for their registered students. The two models of this type are:

- a) There is a formal arrangement between the MOOC provider and borrowing universities (Official form) with this form.
- b) Both the lecturers and their students enrolled on the MOOCs as private participants in this form. They used the MOOC just like any registered participants would have used it (Private form).

The bMOOC adopted at UCC was the last type (2b). Here, lecturers ask students to enrol in a third-party MOOC belonging to another business entity—universities or corporations. Lecturers identify the MOOC that treats topics or skills like what they treat for their campus-based courses. Tutors used various models for this blended learning; some use all or part of the MOOC topics; others use the MOOCs to flip their classroom or as reference materials. In other words, Tutors use MOOCs as open education resources (OERs).

Blended MOOC has become the learning strategy in C21st higher educational institutions (Sari, Bonk & Zhu, 2020). The few available studies on bMOOC have shown it to contribute to innovative thinking and better learning outcomes for students (de Jong, Pickering, Hendriks, Swinnerton, Goshtasbpoor & Reinders, 2020). Though bMOOC has the potential to modernise universities in the developing world. However, there is a dearth of research on this all-important subject matter –bMOOC—especially in the developing world. Thus, the question as to whether bMOOC is suitable for Sub-Saharan universities has to be answered, making this research essential in filling the research gap and aid policy formulation.

The current strengths and limitations of blended MOOC’s adoption and its future opportunities and threats remain unresolved in Ghanaian settings. If integrating blended learning into higher education requires strategic planning (Chenglin & Jianwei, 2016), how much more bMOOC? That is blending classroom courses with MOOCs demands strategic planning. One reason is that the instructional

strategy would be combining contents from two or more entities with different teaching philosophies and target audiences. SWOT analysis has stood the test of time in preparing strategic plans for blended learning (Thammatar & Khlaisang, 2019; Chenglin & Jianwei, 2016). A SWOT analysis of e-learning integration at two universities in Uganda and Tanzania revealed that Tutors understood that e-learning integration provides strengths and opportunities for the universities (Zhu & Mugenyi, 2015). However, the lack of capacity in institutional policies, teacher competencies, and internal investment constituted the universities' weaknesses and threats (Zhu & Mugenyi, 2015). Again, in Hades (2014) research, students perceived the strength of bMOOC as a strategy that made them learn materials independently. However, the students complained of poor internet connectivity and speed. As a result, it is wise to consider the potential benefits and threats of MOOCs. Presently, MOOCs impact all disciplines, and the primary focus has been how MOOCs can be implemented, utilised and supported. To have the optimum impact of the use of MOOCs, instructors need to know about their potential –Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis.

This study attempts to determine the benefits and threats of MOOCs by using the SWOT analysis. SWOT analysis was developed at Stanford Research Institute in the USA and used to analyse Fortune 500 organisations' business data (Humphrey, 2005). Despite the importance and usefulness of bMOOC, SWOT analysis and lecturers' perception of bMOOC has not been adequately studied in Ghana public universities. Al-Marroof, Al-Qaysi, Salloum and Al-Emran (2021) did a systematic review that analysed a total of 64 studies on bMOOC published between 2006 and 2018. According to them, students' adoption or acceptance of b-learning is not a new study as it has been tackled by many scholars. However, such data was missing on that of bMOOC and instructors' adoption or acceptance. Also, the 64 studies they analysed did not include studies on bMOOC conducted in the Africa region. This brings up the issue of some literature gaps in the area of bMOOC on instructors' perspectives, especially literature with Africa as the study area.

Through multi-stage and purposive sampling, the researchers selected the University of Cape Coast (UCC) as the study centre for this study. The University of Cape Coast is currently the topmost-ranked university in Ghana and West Africa and the 4th in Africa ("Word University Rankings", 2021). This makes UCC a qualified standard sample institution to represent other tertiary universities in Ghana, West Africa and Africa in general. The researchers are also predominantly staff of the University of Cape Coast and have been engaged in the organisation of bMOOC of some courses over the years. Hence, it was thought that the University of Cape Coast was an appropriate forum for the study to be situated in the circumstances. Thus, this paper's primary aims are to identify the strengths, weaknesses, opportunities, and threats of bMOOC in the University of Cape Coast, one of the public universities in Ghana, where a few instructors have used MOOC to complement their campus-based courses. The study's findings will help public universities identify and build upon their strengths, discover new opportunities, and eliminate threats associated with adopting and using bMOOC instructional delivery.

Research Questions

Answers to the following questions were asked to achieve the research objectives:

1. In UCC, how do Instructors perceive the internal factors that:
 - a. promote the use of bMOOC?
 - b. prevent the use of bMOOC?
2. In UCC, how do Instructors perceive the external factors that:
 - a. drives the use of bMOOC?
 - b. draws back the use of bMOOC?

Review of Related Literature

SWOT Analysis is a method used to evaluate the 'strengths', 'weaknesses', 'opportunities' and 'threats' involved in an organisation, a business activity, a plan, a project, or a person. It is the basis for establishing strategies for achieving future goals for that entity. SWOT Analysis is a tool used in organizations for strategic planning and management. It may be utilized successfully to

develop organizational and competitive strategies. SWOT Analysis is a simple but powerful tool for sizing up an organisation's resource capabilities and deficiencies, market opportunities, and the external threats to its future (Yanfika, Rangga, Viantimala, Listiana, Mutolib & Rahmat, 2020). Gürel and Tat (2017) defined the elements of SWOT as follows: Firstly, Organisational strengths refers to the characteristics that give advantages over others in the industry, while organisational weaknesses are characteristics that place at a disadvantage relative to others.

On the other hand, environmental opportunities are external elements in the environment that give benefits to the organisation. In contrast, environmental threats refer to the external elements that could cause trouble for the organisation. They indicated that strengths and opportunities are helpful to achieving organisational objectives while weaknesses and threats are harmful to achieving organisational objectives, hence unfavourable for organisations.

The domestic classroom or education settings must be considered before blending MOOC with the in-campus course to avoid the possibility of conflict (Bralić & Divjak, 2018). Many research on MOOC participants' characteristics discovered that the majority had a Bachelor or Master degree and that the MOOC is utilised for work (re)training and lifetime learning in the majority of cases (Cagiltay, Cagiltay & Celik, 2020; Zafras, Kostas & Sofos, 2020).

Conducting a SWOT analysis of integrating MOOC with classroom settings is one means of achieving such blending without conflict. This is because SWOT Analysis can understand MOOCs' logic (Dalipi, Kurti, Zdravkova & Ahmedi, 2017). The freeness of MOOC—and no entry qualification for participation – is one of its greatest strengths, while lack of e-learning experience is a weakness for an organisation wanting to participate in MOOC or bMOOC. On the component of SWOT, the following were identified by Dalipi, Yayilgan, Imran & Kastrati, (2016) as fitting the generic characteristics of MOOCs:

- **Strengths:** a source for lifelong learning, reputation and brand recognition, global

presence, improving education accessibility, low prices, and creating large online communities.

- **Weaknesses:** a large number of dropouts, certification and accreditation, not suitable for complex education, interaction and creativity, and verification of the learner's identity.
- **Opportunities:** These include provider's internationalisation, a large pool of students, desire to learn more, learning analytics, new pedagogical innovations, marketing tool, and education research and development.
- **Threats:** data security and protection, ethical privacy and copyright issues, government regulations, job consequences for professors, assessment-cheating

According to the study of Guma, Buruga and Taban (2019), the strength of blended learning was seen to serve many students in a short time. Over time, students complained of low bandwidth and unstable internet, lack of a plagiarism tool, and insufficient computers. The ownership of computing devices and access to the internet is a sure combination of the use of EdTech in any society. It was observed that the inclusion of competency-based learning systems that made it easier to manage students to progress in line with university expansion plans and an accessible way of learning regardless of location and available external support are among opportunities cited (Guma et al. 2019). Moreover, Guma et al. (2019) found unreliable power supply, unreliable internet connection, exchanges of username and passwords by students, and internet shorthand were the threats identified in blending learning approaches.

Presently, MOOC has become a global movement in education and has received significant attention in higher education (Pant, Lohani & Pande, 2021; Albelbisi & Yusop, 2020). MOOC can enhance both academic and skill-based training (Albelbisi & Yusop, 2020) and keep learners updated in skills to achieve continuous development (Liyanagunawardena, 2015). In Malaysia, the Ministry of Education has paid serious attention to MOOCs. In October 2014, the Minister of Education declared Malaysia as the first country to implement MOOC for all public universities and currently remains the only country where MOOC is implemented on a national platform (Albelbisi & Yusop, 2020).

MOOC became popular in the early 2010s and was promoted as an alternative to regular classroom learning style, focusing on the lecturing instructor and relying on digital content available to students. MOOC is facilitating a new pathway for effective teaching and learning. It symbolises an online learning platform that allows unlimited users unfettered access to more than traditional learning models and materials, such as recorded lectures, quizzes, interactive forums, and communities. It is one of the most recent additions to distance education, aimed at digital participation and open resources. According to Pant et al. (2021), MOOCs may play a critical role in a nation like India, where most individuals living in distant areas lack significant access to skill upgrading and quality learning. Thus it may be advantageous to people hampered by financial insecurity, physical disabilities, or commuting difficulties. In terms of an open education revolution, MOOCs provide immense potential for people by giving millions of them access to high-quality learning through the internet.

The need to undertake this study finds motivation because bMOOC has been demonstrated to be a helpful companion in pursuing education. Its integration seems to be convenient to both instructors and students. As much as it is so, some challenges call for immediate steps to be taken to ensure the use of bMOOC will achieve the various objectives set for the educational intuitions, colleges, faculties, and departments. Again, technology acceptance has become one of the dominant research trends in learning management systems (LMSs). While many research studies are conducted in this area, there is still a scarcity of knowledge concerning a holistic review and taxonomy of studies in this field (Al-Nuaimi & Al-Emran, 2021).

Moocs Limitations

Yousef, Chatti, Schroeder, Wosnitza, and Jakobs (2014) conducted a thorough assessment of the MOOC literature, emphasising that the initial concept of MOOCs, which aimed to remove barriers to education for everyone, anywhere, and at any time, is far from reality. In essence, most MOOC deployments to date have followed a top-down, centralised, regulated, and teacher-centred learning

style. MOOCs built from the ground up, student-centred, completely open, and decentralised remain the exception instead of the rule.

The drawbacks of MOOCs include pedagogical issues with evaluation and feedback (Caballé & Conesa, 2018), a lack of engagement between learners and video content (Hew, Qiao & Tang, 2018) and high drop-out rates, with an average of 95% of course participants dropping out (Yousef et al., 2014). One of the biggest challenges with MOOCs is that people do not realise how important face-to-face interaction is (Marrich, Lafram, Berbiche & El Alami, 2020). Although a theoretical pathway may exist to offer accreditation of MOOC certificates via prior learning, the criteria for assessment of such learning are not entirely in place (Costello, Holland & Kirwan, 2018). MOOCs appear to have limitations compared to a traditional face-to-face course or a smaller online credit course with high faculty involvement due to their large number of students, lack of direct faculty interaction with individual students, and a “pre-programmed” course of study and assessments. However, they are not limited as much as they are traits that distinguish MOOCs.

MOOCs are based on scalability, allowing thousands of students to receive the lectures of a world-class lecturer simultaneously. Lectures, evaluations, and activities for a course – particularly an online course – are not cheap, and the professor’s knowledge behind the content is often unique to a single university. The professor’s classroom door is flung wide by a MOOC, allowing him to instruct more than a few dozen students at a time. Because of the magnitude, the faculty member’s “hands-on” engagement is restricted. This places the burden for learning the subject squarely on the individual student’s shoulders, as well as their drive to study. It also moves the discourse and dialogue about the topic to a more diversified student population — a community of learners – who may be anywhere in the world.

Moreover, the study revealed some external factors that may pose a challenge to implementing a bMOOC. These factors were unstable power supply and distrust in the MOOC system’s ability to run uninterrupted academic activities throughout the academic year. Also, the respondents stated that

lack of proper understanding of the use of the online platform, laziness and computer illiteracy on the part of students, the discrepancy between online and face-to-face contents, challenges with the MOOC system, heavy workload and time constraints and inadequate facilitating conditions accounts for some of the problems with bMOOC. Given these problems, the instructors recommended ensuring the smooth running of bMOOCs in tertiary institutions. Again, there should be proper training of students on the system, uniformity of MOOC and face-to-face contents, sufficient facilitating conditions, sufficient time allocation for course contents and regular academic load, a robust MOOC system, and customised MOOC content in the university.

MooC Opportunities

A lot has been said of the potential of MOOC certificates, which may be transferable to college credits. This is an opportunity for students, given the high number of undergraduate students entering as transfer students. It has been estimated that if a student could transfer approximately two years' worth of MOOC courses to a decent four-year college, it could cut tuition costs by half compared to regular college expenses (Waks, 2019; Littenberg-Tobias & Reich, 2020). MOOC courses are not bound by the university's typical term and semester patterns; therefore, they can begin at any moment and last for any amount of time. As a result, MOOC is compelling for short-term courses that are intensely focused on a topic, as well as a series of courses that may lead to a deeper understanding of a knowledge field. Again, MOOCs are not restricted by traditional university accreditation; they can be provided with or without a certificate or "badge" showing that a student has finished the course. The certification can exist independently of the class (Smriti & Kumar, 2021). One of the features of MOOCs is openness. It refers to giving a learning experience to a large number of individuals all around the world, irrespective of their location, age, income, ideology, or degree of education, with no admission prerequisites or course fees to access this high-quality education. Openness also refers to the provision of Open Educational Resources (OER) following the 4Rs: Reuse, Revise, Remix, and Redistribute (Thomas, 2017).

Challenges in the Traditional Classes

MOOCs pose a threat to traditional education, particularly at public universities, if MOOCs reach a critical mass of students who would accept and prefer to study through a free open course overpaying for a course. Quality is defined by users, not merely by education institutions, MOOC providers, or employers. So, to define excellent education, we must evaluate the different qualities as "defined" and perceived by the "user." Students may forego the opportunity to enrol in a traditional university or college if they can gain access to courses and even credits from top-ranked universities and colleges throughout the world, regardless of time or place. This would be a competition between education chains, professors, among others. E-learning encourages learner autonomy and allows students to gain information and skills without relying on teachers.

The Practical Implications and Theoretical Contributions of the Study

This study implies that the various universities are to put in place measures to promote the widespread use of bMOOC to ensure that they benefit from it. This is because there are many strengths and opportunities in the use of bMOOC in teaching and learning. It is also believed that the theoretical contributions lie in the fact that it serves as a valuable guide to the management of the various universities of what they can do to promote the effective and efficient use of bMOOC to attain their academic goals. The study's findings can be generalised to other jurisdictions, including that of other universities in Ghana, Africa and the world, especially since the instructors selected have experiences with other parts of the world in terms of their use of bMOOC. Literature was also reviewed from other parts of the world that ensured some international backing and foundation to the study.

These notes were collected as the original data for further analysis. The focus group transcripts were subsequently analyzed by content analysis. Content analysis is often applied to analyze interview transcripts to reveal patterns and models underlying peoples' ideas and thoughts (Bryman & Bell, 2015). In this study, a mixed method by combining both

deductive and inductive approaches was applied when categorizing the themes from the transcripts. Deductive coding is based on categories suggested by an existing theory or model, while inductive coding is used to generate categories from transcripts during the coding procedure (Bryman & Bell, 2015)

Things within the organisation can make or unmake an information technology (IT) or information system (IS) to have sound effects. These are the organisation’s strengths and weaknesses, respectively. The internal factors that promote the use of technology are their strength, while those that prevent their use are weaknesses.

Table 1 indicates what entities should do to get what they want from the environment around them.

Table 1 Two-by-Two Matrix: SWOT Analysis

	Strengths	Weaknesses
Opportunities	Achieve opportunities that significantly match the organisation's strengths.	Overcome weaknesses to attain opportunities
Threats	Use strengths to reduce the organisation's vulnerability to threats	Prevent weaknesses to avoid making the organisation more susceptible to threats.

Source: Chermack and Kasshanna (2007).

Settings

The researchers undertook this study four years after the lead author blended a campus course known as ITS101 on Microsoft Office suite with a third-party MOOC from Alison. ITS101 is an Information Technology Skills course for all first-year students at the University of Cape Coast, Ghana. Each student registered for Alison’s MOOC platform for Microsoft Office 2010 and ALISON ABC IT - Computer Training Suite. They then attend a weekly one-hour practical hands-on session at the University’s ICT Centre that houses two hundred (200) networked computers. Students who watch the MOOC’s videos participate in the discussion and assessment. The mark they got from the Alison platform became part of their continuous course

assessment. There is also an in-house assessment done on the university’s MOODLE platform. Thus, ITS101 uses a blended MOOC instructional delivery approach. The researchers know that some lecturers were also blending their courses with other MOOC platforms.

Methodology

The nature of the study was qualitative and descriptive. The study used a purposive sampling technique. This is a non-random and nonprobability sampling that enables researchers to select the sample from the study population. The purposive sampling was because the survey was limited to only campus-based instructors at the University of Cape Coast (UCC) who had experienced in the used of third party MOOC to complement their campus-based courses. The empirical data collection instrument was an online Google form containing open-ended questions using the paragraph type for “Long-answer text”. The Google form was sent to UCC faculty electronic mailing list software application. Table 2 shows the questions used for this study among others in the Google form.

Table 2 Question included in the Research

1. What do you think are the strengths of using blended MOOC in UCC?
2. What do you think are the weaknesses of using blended MOOC in UCC?
3. What do you think are the opportunities provided by the use of blended MOOC in UCC?
4. What do you think are the threats posed by blended MOOC in UCC?

Respondents were to type in their responses just as they would for a face-to-face interview. In total, 25 instructors participated in the survey.

Table 3 shows the sample characteristics. It shows the distribution of the individual sample of the study according to the variables (gender, specialization, and years of experience in teaching with bMOOC).

Table 3 Sample characteristics

Personal Information	Frequency	Frequency	%
Gender	Male	21	84
	Female	4	16
Specialization	Information Technology	5	20
	Computer Science	7	28
	Business Education	4	16
	Management studies	3	12
	Sociology	2	8
	Mathematics	2	8
	Economics	2	8
Blended MOOC Teaching Experience (years)	2 years	4	16
	3 years	15	60
	5 years	6	24
		25	100

Source: Fieldwork 2021

The study sought to have a broad-based view of how MOOC is being incorporated into entire University of Cape Coast campus-taught courses hence the need to include respondents from the various academic disciplines. This was possible because, at the University of Cape Coast, blended learning is not in the domain of a particular discipline. All instructors and lecturers have the discretion to incorporate it into their modus operandi for teaching and learning. On the analysis of data collected, thematic analysis was adopted in analysing the study with MAXQDA statistical software version (R150410).

Instructors were asked to identify the strengths and weaknesses of implementing bMOOCs as an instructional delivery strategy at UCC. Table 4 depicts what instructors considered the strengths and weaknesses of bMOOC, and the number of responses on a particular theme is placed in brackets.

Table 4 Key Responses on the Strength and Weakness of b-MOOC

Strengths	Weaknesses
Availability of facilitating conditions (21)	Inadequate computers to support teaching and learning (22)
Availability of preparatory IT skills courses (20)	Slow internet connectivity (11)
Experienced technicians and instructors (20)	Inadequate computer capacity Computer Centre for large student population (9)
Good teaching and learning environment (18)	Wi-Fi inaccessibility (20)
	Less support from the e-learning section (22)
	Poor IT skills among students (12)
	No e-learning policy (15)
	No OER policy (12)
	Poor IT skills among students (18)
	Teaching staff (23)

Source: Fieldwork 2021

Again, things outside the organisations can make or unmake them in achieving their strategic plans and, for that matter, the future drive of which information technology (IT) or information system (IS) are examples. The external factors that can drive an organisation to achieve its strategic goals are their opportunities, while those that can draw the organisation back are threats. Instructors were asked to identify opportunities and threats. Table 5 is a summary of the instructors' opinions on the said matter.

Table 5 Key Responses on Opportunities and Threats of b-MOOC

Opportunities	Threats
An advantage of running efficient an expanded distance education (20)	The possibility of changing the teaching philosophy of the university (10)
Increase student population (23)	Truancy to classroom lectures (20)

Enhancing the digital skills and dexterity of both instructors and students (25)	The existing traditional methods of teaching would be endangered (10)
Improves the University recognition (20)	Third-party systems (MOOC) regulation may not favour teaching and learning of UCC (6)
The possibility of combining regular, distance and sandwich programmes (15)	Copy right issues (25)
Introduction of high quality and market demanding courses (15)	Provides an effective and cost-efficient alternative to the university's distance education (15)
Increasing the variety of elective courses (13)	
Reduce the heavy demand on the timetable and lecture rooms(18)	
Outsourcing of course contents, especially introductory and universally mandatory courses such as communicative skills, statistics, ICT and research (25)	

Source: Fieldwork 2021

At the University of Cape Coast, using e-learning was not mandatory until 2020 due to COVID-19. However, MOODLE learning management systems (LMS) have been installed since 2007. The university's ICT strategic plans since 2003 have contained the use of e-learning to deliver instruction and enhance the digital skills of members of its community. The use of bMOOC since 2014 in such an environment will obviously be challenged, of which solutions must be identified to reduce the problems to their barest minimum. Table 6 is a summary of the instructors' opinions on this subject matter.

Table 6 Key responses on problem and solution of b-MOOC

Problem	Solution
Lack of proper understanding of the use of the online learning platform (17)	Training of students on the use of the online learning platform (22)
Laziness (17)	Uniformity of MOOC and face-to-face contents (17)
Computer illiteracy (17)	Strengthen facilitating conditions (25)
The discrepancy between online and face to face contents (18)	Sufficient time allocation for course content and appropriate workload (23)
System Challenges with the online learning platform (17)	Improving the online learning system (17)
Heavy workload and time constraint (25)	Customised MOOC content for the university (14)
Inadequate facilitating conditions (22)	

Source: Fieldwork, 2021.

The first step in solving a problem is to identify it, and alternative solutions must also be recognised. Finally, concrete actions should be prescribed to implement the best alternative solutions to the problems identified.

Discussion

According to the study, respondents asserted that facilitating conditions such as computers, internet access, and ICT laboratories are available. Studies from Fianu, Blewett, Ampong and Ofori (2018) showed that to run an effective bMOOC system, facilitating conditions such as reliable internet connectivity and availability of computers are needed to ensure its smooth running. A MOOC course does not compel students to complete all the covered topics or assignments. They may only go through the lectures and quizzes, which they feel are essential. This also makes it easier for students to combine educational materials, activities, and packages for many disciplines to serve their needs. As a result, the MOOC curriculum is not limited and is termed open.

The study also showed that even though facilities were available to support bMOOC adoption in the study area, these facilities were not adequate to run bMOOC effectively. This finding agrees with Eze, Chinedu-Eze and Bello (2018), which revealed that most universities within the Sub-Saharan regions had poor internet access. Again, the study's conclusions showed that most of the users of the bMOOC, that is, the students, had poor IT skills, which was seen to affect the smooth functioning of the bMOOC. This was similar to what was revealed by Eze et al. (2018), where users' attitudes were factors affecting online learning. Despite the weaknesses, the study results showed that b-MOOC, if properly implemented, would expand the distance education section of the university, increase student intake, reduce the cost of physical infrastructure, and enhance the university's public image. This aligns with the findings of Kaushik (2018), which indicated that MOOCs are providing new opportunities to various professionals to participate in a programme, create one themselves, or collaborate with another institution or even on a global level.

Conclusion and Recommendations

The design of blended learning environments that combine face-to-face and online learning can be a versatile and practical paradigm for improving classroom learning and interactions with instructors and peers (Saragih, Cristanto, Effendi & Zamzami, 2020). Today most universities are moving from their traditional engagement with students to online. Given the rise of the novel covid-19 pandemic, this development is now very apparent. Developing and hosting online courses are time-consuming and financially burdensome, especially for cash-strapped universities in the global south, where Ghana belongs. MOOC has come to alleviate the said situation. Universities within this geopolitical group must blend it, especially for their mandatory and elective courses. As MOOC and its variants are critical EdTech solutions available today, universities must align MOOC with their strategic goals.

However, ere this alignment, their SWOT analysis should be conducted before usage. Universities in similar situations like the University of Cape Coast should embrace bMOOCs instead of reinventing

the wheel unnecessarily. The essence of the SWOT analysis presented in this paper is to identify the positives and negatives in blending MOOCs at the University of Cape Coast. Management of the university should minimise the negatives identified in this paper while maintaining if not improving the positives. It is recommended that universities maintain robust and reliable internet connectivity that is accessible to all users before running bMOOCs. Again, the universities must provide adequate ICT laboratories to aid students who do not have personal computers or smart mobile devices. Academic staff should be trained in integrating technology into their lessons as well as facilitating the classes. Students should not be left behind in their effort in learning with and through technology, especially reading and taking lecture notes with technology to enhance their academic productivity. Finally, the necessary supporting services should be provided for members of the university's community in their drive of integrating technologies into their daily educational activities. To address these restrictions, the new design paradigm of bMOOCs (bMOOCs), which attempt to bring together in-class (i.e. face-to-face) interactions and online learning (MOOC) components as a mixed environment, can overcome some of the challenges that standalone MOOCs confront (Saragih et al., 2020). Indeed, the bMOOCs method can encourage student-centred learning, facilitate practical assessment and feedback, support the interactive design of online tutorials, take into account the various patterns of MOOC participants, and incorporate the benefits of face-to-face interactions into the MOOC environment.

References

- Albelbisi, Nour Awni, and Farrah Dina Yusop. "SWOT Analysis on the Implementation of MOOC in Malaysia." *MOOCs in Malaysia towards Globalised Online Learning*, edited by Farrah Dina Yusop, et al., UPM Press, 2020, pp. 27-40.
- Al-Marouf, Rana, et al. "Blended Learning Acceptance: A Systematic Review of Information Systems Models." *Technology, Knowledge and Learning*, 2021.

- Al-Nuaimi, Maryam N., and Mostafa Al-Emran. "Learning Management Systems and Technology Acceptance Models: A Systematic Review." *Education and Information Technologies*, 2021.
- Al-Nuaimi, Maryam N., et al. "Digitising Learning during the Outbreak of COVID-19 Pandemic: Lessons Learned from the Most Infected Countries." *Emerging Technologies during the Era of COVID-19 Pandemic*, edited by Ibrahim Arpacı, et al., Springer, 2021.
- Albelbisi, Nour Awni, and Farrah Dina Yusop. "Systematic Review of a Nationwide MOC Initiative in Malaysian Higher Education System." *Electronic Journal of e-Learning*, vol. 18, no. 4, 2020, pp. 287-98.
- Arpacı, Ibrahim, et al. "The Impact of Knowledge Management Practices on the Acceptance of Massive Open Online Courses (MOOCs) by Engineering Students: A Cross-Cultural Comparison." *Telematics and Informatics*, vol. 54, 2020.
- Bralić, Antonia, and Blazenka Divjak. "Integrating MOOCs in Traditionally Taught Courses: Achieving Learning Outcomes with Blended Learning." *International Journal of Educational Technology in Higher Education*, vol. 15, no. 1, 2018.
- Caballé, Santi, and Jordi Conesa. "Conversational Agents in Support for Collaborative Learning in MOOCs: An Analytical Review." *International Conference on Intelligent Networking and Collaborative Systems*, 2018, pp. 384-94.
- Cagiltay, Nergiz Ercil, et al. "An Analysis of Course Characteristics, Learner Characteristics, and Certification Rates in MITx MOOCs." *International Review of Research in Open and Distributed Learning*, vol. 21, no. 3, 2020, pp. 121-39.
- Chenglin, Huan, and Chen Jianwei. "SWOT Analysis on the Development of MOOC in China's Higher Education." *American Journal of Educational Research*, vol. 4, no. 6, 2016, pp. 488-90.
- Costello, Eamon, et al. "The Future of Online Testing and Assessment: Question Quality in MOOCs." *International Journal of Educational Technology in Higher Education*, vol. 15, 2018.
- Dalipi, Fisnik, et al. "Rethinking the Conventional Learning Paradigm towards MOOC based Flipped Classroom Learning." *16th International Conference on Information Technology Based Higher Education and Training*, 2017.
- Dalipi, Fisnik, et al. "Towards Understanding the MOOC Trend: Pedagogical Challenges and Business Opportunities." *International Conference on Learning and Collaboration Technologies*, Springer, 2016, pp. 281-91.
- Daniel, John. "Making Sense of MOOCs: Musings in a Maze of Myth, Paradox and Possibility." *Journal of Interactive Media in Education*, 2012.
- de Jong, Peter G., et al. "Twelve Tips for Integrating Massive Open Online Course Content into Classroom Teaching." *Medical Teacher*, vol. 42, no. 4, 2020, pp. 393-97.
- Eze, Sunday Chinedu, et al. "The Utilisation of e-learning Facilities in the Educational Delivery System of Nigeria: A Study of M-University." *International Journal of Educational Technology in Higher Education*, vol. 15, 2018.
- Ali, Guma, et al. "SWOT Analysis of Blended Learning in Public Universities of Uganda: A Case Study of Muni University." *Multidisciplinary Scientific Journal*, vol. 2, no. 4, 2019, pp. 410-29.
- Fianu, Eli, et al. "Factors Affecting MOOC Usage by Students in Selected Ghanaian Universities." *Education Sciences*, vol. 8, no. 2, 2018.
- Gürel, Emet, and Merba Tat. "SWOT Analysis: A Theoretical Review." *The Journal of International Social Research*, vol. 10, no. 51, 2017, pp. 994-1006.
- Haron, Nor Hafiza, and Yusof Hafidzan. "The Acceptance of MOOC in Teaching and Learning Process: A Case Study at Malaysian Public University." *MOOC (Massive Open Online Courses)*, edited by Dragan Cvetković, Intech Open, 2021.

- Hew, Khe Foon, et al. "Understanding Student Engagement in Large-Scale Open Online Courses: A Machine Learning Facilitated Analysis of Student's Reflections in 18 Highly Rated MOOCs." *International Review of Research in Open and Distributed Learning*, vol. 19, no. 3, 2018.
- Humphrey, A. "SWOT Analysis for Management Consulting." *SRI Alumni Newsletter*, 2005.
- Kaushik, Anna. "SWOT Analysis of MOOCs in Library and Information Science Domain." *Library Hi Tech News*, vol. 35, no. 9, 2018, pp. 11-14.
- Littenberg-Tobias, Joshua, and Justin Reich. "Evaluating Access, Quality, and Equity in Online Learning: A Case Study of a MOOC-based Blended Professional Degree Program." *The Internet and Higher Education*, vol. 47, 2020.
- Liyanagunawardena, Tharindu Rekha, et al. "MOOCs: A Systematic Study of the Published Literature 2008-2012." *International Review of Research in Open and Distributed Learning*, vol. 14, no. 3, 2013, pp. 202-27.
- Liyanagunawardena, Tharindu Rekha. "Massive Open Online Courses." *Humanities*, vol. 4, no. 1, 2015, pp. 35-41.
- Marrich, Aicha, et al. "A Khan Framework-Based Approach to Successful MOOCs Integration in the Academic Context." *International Journal of Emerging Technologies in Learning*, vol. 15, no. 12, 2020, pp. 4-19.
- Marshall, Stephen James. "Strategic Planning as Sense-Making." *Shaping the University of the Future*, Springer, 2018, pp. 413-36.
- Nugroho, Anam Hadi, et al. "Analysis of Technology Acceptance Model: Case Study of Traveloka." *Arthatama: Journal of Business Management and Accounting*, vol. 1, no. 1, 2017, pp. 27-34.
- Pant, Harsh Vardhan, et al. "MOOCs in Higher Education: Current Trends in India and Developed Countries." *Ubiquitous Technologies for Human Development and Knowledge Management*, IGI Global, 2021, pp. 58-77.
- Saragih, Maradoni Jaya, et al. "Application of Blended Learning Supporting Digital Education 4.0." *Journal of Physics: Conference Series*, 2020.
- Sari, Annisa R., et al. "MOOC Instructor Designs and Challenges: What can be learned from Existing MOOCs in Indonesia and Malaysia?." *Asia Pacific Education Review*, vol. 21, 2020, pp. 143-66.
- Smriti, Ani, and Rajesh Kumar. "Present Status of e-Banking in India: Challenges and Opportunities." *International Journal of Creative Research Thoughts*, vol. 9, no. 9, 2021, pp. 556-61.
- Taylor, Shirley, and Peter A. Todd. "Understanding Information Technology Usage: A Test of Competing Models." *Information Systems Research*, vol. 6, no. 2, 1995, pp. 144-76.
- Thammetar, Thapanee, and Jintavee Khlaisang. "Promoting Open Education and MOOCs in Thailand: A Research-Based Design Approach." *MOOCs and Open Education in the Global South*, edited by Ke Zhang, et al., Routledge, 2019, pp. 140-55.
- Thomas, Raysh. "Use of Open Educational Resources: Indian Scenario." *International Journal of Library & Information Science*, vol. 6, no. 5, 2017, pp. 17-26.
- Tornatzky, Louis G., et al. *Processes of Technological Innovation*. Lexington books, 1990.
- Vaidhyanathan, Siva. "Open Source as Culture / Culture as Open Source." *The Social Media Reader*, edited by Michael Mandiberg, New York University Press, 2012, pp. 24-31.
- Waks, Leonard J. "Massive Open Online Courses and the Future of Higher Education." *Contemporary Technologies in Education*, edited by Olusola O. Adesope and A.G. Rud, Palgrave Macmillan, 2019, pp. 183-213.
- World Bank. *Remote Learning, Distance Education and Online Learning during the COVID19 Pandemic: A Resource List by the World Bank's Edtech Team*. World Bank Group, 2020.
- Yanfika, H., et al. "Evaluation of the Success of Programs and Strategy for Sustainable Coastal Community Development in Tanggamus Regency." *Journal of Physics: Conference Series*, 2020.

- Yousef, Ahmed Mohamed Fahmy, et al. "MOOCs: A Review of the state-of-the-art." *International Conference on Computer Supported Education*, 2014.
- Zhu, Chang, and Kintu Justice Mugenyi. "A SWOT Analysis of the Integration of e-learning at a University in Uganda and a University in Tanzania." *Technology, Pedagogy, and Education*, vol. 24, no. 5, 2015.
- Zafras, Ioannis, et al. "MOOCs & Participation Inequalities in Distance Education: A Systematic Literature Review 2009-2019." *European Journal of Open Education and E-learning Studies*, vol. 5, no. 1, 2020.
- "World University Rankings." *Times Higher Education*, <https://www.timeshighereducation.com/content/world-university-rankings>

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