

The COVID-19 Pandemic: Challenges and Opportunities for Blended Teaching and Learning at One State University in Zimbabwe

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ABSTRACT

The main objective of the study was to analyse lecturers' and students' perceptions on the effect of blended teaching and learning (BTL), following university closure due to COVID-19 pandemic induced-lockdown. The pandemic brought unprecedented effects on teaching and learning at state universities in Zimbabwe. To save education, BTL was adopted at one state university across all its schools. The study was motivated by the fact that the severity of a pandemic does not rest in its effects but, rather, on effective policy responses to the same. As such, effective policy responses should be informed by scientific research. Thus, a qualitative research paradigm informed the study. In addition, online questionnaires and interviews were used for data collection using a sample of 30 respondents, constituting 6 lecturers and 24 students. The principal result was that on average, lecturers are more positive on BTL than students. WhatsApp was a popular online teaching and learning platform before and during COVID-19, for both lecturers and students. Major challenges to BTL were lack of technical support and access to internet services. The study also established that students and lecturers were for the continuation of BTL after the pandemic, but with improvements. Consequently, the university is recommended to promote student awareness on the benefits of blended learning and develop its own online teaching and learning platform.

Key Words: Blended/ hybrid teaching and learning, Covid-19, Internet, WhatsApp

BACKGROUND

In the contemporary era, COVID-19 pandemic has been the most topical global issue. COVID-19, a disease caused by a novel respiratory syndrome coronavirus 2 (SARS-CoV-2), broke out in the City of Wuhan, Hubei Province, China, in December 2019. Early evidence suggested that the coronavirus mainly spreads between people in close contact with each other (WHO, 2021). Accordingly, several countries enforced lockdowns to minimise the spread, and measures targeted at minimising the movement of people. This meant that the

pandemic graduated from a health shock to a global economic and social crisis (UNDP, 2020).

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The pandemic has affected every sphere of life, including higher education, making it increasingly difficult to ignore its broad and profound effects. Education, particularly at higher and tertiary levels, is highly regarded in sustainable development circles at global and national levels. The sustainable development Goal Four, which seeks to ensure inclusive and equitable quality education for all (United-Nations, 2016), is under threat from the COVID-19 pandemic. Education is a "people" sector, and the current lockdown restrictions have severely hampered traditional education systems. According to Pokhrel and Chhetri (2021), learners in over 200 countries have been affected. As of 30 June 2021, Zimbabwe was under lockdown, having recorded a total of 53,665 cases and 1 859 deaths, while 39,792 people have recovered (World Health Organisation [WHO], 2021).

Following the initial panic, the world quickly responded and vowed to live in the "new normal." As such, each sector adopted contingency measures to keep alive. The education sector also adopted BTL, including online teaching and learning. online examinations and assessment, and remote teaching and learning (Alsoufi et al., 2020; Chaturvedi et al., 2021; 2020; Pokhrel & Chhetri, 2021; Khan et al., 2021; Raman et al., 2021). Understandably, these studies have looked at more visible issues. Important as they are, these issues envelope less visible but equally important consequences brought by the COVID-19 pandemic. Attempts on BTL have been made by Brom et al. (2021) and Kennedy (2021). However, most notably, the effects of BTL have not been given adequate attention, especially at higher education level.

While several studies have examined the impact of COVID-19 on different areas of outcomes in Zimbabwe (Chaora, 2020; Gavi et al., 2021; Moyo-Nyede and Ndoma, 2020; Rukasha et al., 2021), studies focusing on higher education in Zimbabwe are relatively few. For instance, Maphosa (2021) and Matimaire (2020) examined the use of radio and smartphones as modes of teaching and learning, as well as WhatsApp for teaching and learning at university level, respectively. The evidence from these studies, though insightful, is not exhaustive. Accordingly, the contribution of the current study is to assess state university lecturers' and students' perceptions and attitudes towards BTL, as well as challenges and opportunities posed by the same in Zimbabwe.

A Snapshot of Covid-19 Pandemic and Higher Education in Zimbabwe

Globally, statistics show that 220 million tertiary students were suddenly disrupted in 2020 by university closures due to COVID-19. Also, some universities across the globe reported declining enrolment (UNESCO, 2020). Consequently, universities' research and extension activities have been severely disrupted.

Though necessary and effective, the proposed lockdown measures have brought wide and profound effects on the higher education sector. Due to the different lockdown level restrictions, higher education institutions in Zimbabwe were either fully or partially closed. During these closures, most higher learning institutions migrated from face-to-face (FTF) to BTL.

As the pandemic progressed, Zimbabwean universities equally recorded increasing cases as well. The University World News (2021) reported that in June 2020, the Midlands State University closed its Zvishavane and Gweru campuses after a significant number of students tested On 28 June 2020, the state positive. university under study responded to the pandemic by ordering students to vacate campuses due to the continued rise in COVID-19 cases. Also, sister institutions of higher education in the province and other parts of the country recorded some outbreaks, which led to forced closure. Resultantly on 2 July 2020, the government ordered the suspension of FTF lectures at all universities.

Following these closures, universities adopted contingency teaching and learning models that included e-learning, especially Google Classroom, Google Meet, and ZOOM, as teaching and learning platforms. However, universities had the chance to conduct FTF lectures in between lockdowns, albeit cautiously. Apparently, a blended approach was mainly used, allowing students to come in grouped phases.

The COVID-19 Pandemic and Teaching and Learning at the State University

Following the national lockdown measures announced by the government of Zimbabwe on 30 March 2020 following Statutory Instrument (SI) 76/2020 and SI83/2020, the state university suspended FTF lectures. However, in a circular to staff and students, the Vice Chancellor announced

that the semester "is still going on." How would teaching and learning proceed when the university doors were closed? The university quickly adopted a special remote learning facility, Google Classroom, allowing continuous interaction between lecturers and students. Although this was not a new platform to some, it was new to most lecturers and students. When the national lockdown restrictions were relaxed, higher institutions of learning were given the leeway to open for FTF interaction in September 2020.

To minimise the spread of the disease, the state university adopted a BTL approach. The approach meant that students would come for physical interactions in groups and batches, starting with examination classes. This model worked favourably well, and allowed the university to complete two academic semesters.

OBJECTIVES

The following objectives are derived from the main research question which reads: What are the perceptions of lecturers and students in Zimbabwe's higher education towards BTL in the context of Covid-19 pandemic?

The research's specific objectives are to:

- 1. Explain the effect of blended learning on the composition of online teaching and learning platforms.
- 2. Find out if BTL is appropriate for university courses.

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- 3. State the effects of blended learning on lecturers' professional development.
- 4. Determine the effects of blended learning on lecturers' motivation to learn.
- 5. Identify the challenges and opportunities associated with BTL.
- 6. Provide recommendations on how to improve the effectiveness of blended learning.

Research Sub-questions

- This study is informed by the following research questions:
- 1. What is the effect of blended learning on the composition of online teaching and learning platforms?
- 2. How effective is BTL for university courses?
- 3. What are the effects of blended learning on lecturers' professional development?
- 4. How does blended learning affect lecturers' and learners' motivation?
- 5. What are the challenges and opportunities associated with BTL?
- 6. How can BTL's effectiveness be improved?

LITERATURE REVIEW

Studies on the impact of BTL are many. However, most of them (Szadziewska and Kujawski, 2017; Kavitha and Jaisingh, 2018; Banci and Soren, 2008; Means et al., 2013; Kenney and Newcome, 2011) were carried out before the COVID-19 pandemic. Post-COVID-19 studies (including Alsarayreh, 2021; Bordoloi et al., 2021; Mahyoob, 2020; Nijakowski et al., 2021; Saboowala and Mishra, 2021) are still scant but growing. While most studies find that blended learning is enhancing teaching and learning, a few studies (Szadziewska and Kujawski, 2017; Kavitha and Jaisingh, 2018) have documented that shortcomings of BTL are likely.

In a recent study, Ayob et al. (2020) analysed the blended learning concepts that could be implemented in teaching and learning and the issue arising in promoting a better understanding of the concepts. The discussion leads to the potential of using a station rotation model of blended learning for future study, as the review from the past studies revealed that this model had a positive impact on students' achievement.

Also, Szadziewska and Kujawski (2017) examined the advantages and disadvantages of the blended-learning method used in the educational process. The study specifically sought to assess the opinion of undergraduate students. The study revealed interesting results. It was established that the blended-learning method is a good solution for supporting the traditional teaching process.

Another study focusing on student experiences was by Kavitha and Jaisingh (2018). The paper acknowledged that learning analytics is a growing trend at all levels of education. The objective of the paper was to examine the students' experiences in blended learning environments. The study's key findings were that the blended learning approach is more beneficial for students who are skilled in using specific computer programs and applications. The study results also provide new insights into student preferences for in such knowledge-sharing learning collaborative environments. It is essential to highlight that the benefit of blended learning is more pronounced for the students who are already skilled in computer programs. It, therefore, follows that blended learning may pose challenges.

Yilmaz and Orhan (2011) conducted an extensive survey to explore students' academic achievement following the introduction of the blended learning technique in the 'Instructional Technologies and Material Development' course. It was disclosed that а blended learning environment positively affected academic achievements, using web-based learning environments regularly and attending to learning environments for both deep and surface learners. The results echo earlier findings by Banci and Soren (2008), who found out, from a survey that students enjoyed participating in the blended learning environment. Students' achievement levels and their frequency of participation at forums affected their views about the blended learning environment. The responses also revealed that FTF interaction in a blended learning application had the highest score. This result demonstrated the importance of interaction and communication for the success of online learning. Findings by Banci and Soren (2008) and Yilmaz and Orhan (2011) were cemented by a survey of related evidence by Means et al. (2013). The review of 45 studies established that, on average, students in online learning conditions performed modestly better than those receiving FTF instruction. The advantage over FTF classes was significant in those studies contrasting blended learning with traditional FTF instruction, but not in those contrasting purely online with FTF conditions.

More evidence on student perceptions on blended learning is provided by Kintu et al. (2017). They studied the effectiveness of a blended learning environment focusing on relationship between the student characteristics/background, design features, and learning outcomes. The results indicate some of the student that characteristics/backgrounds and design features are significant predictors for student learning outcomes in blended learning.

Unlike most studies that focused on learners' perceptions (including Szadziewska and Kujawski, 2017; Kavitha and Jaisingh, 2018, and Jeffrey et al. 2014) drew attention teachers' perceptions. to Classroom components were more highly valued by teachers than those online, an attitude driven mainly by their perception that specific learning functions were best suited to particular formats. Most teachers used welldeveloped engagement strategies in their classroom teaching, compared to minimal strategies online.

Further, the study reported a lack of integration between online and classroom components. It can be pointed out, from the results, that blended learning may fail to fulfil its promise of better learning. These findings provide an impetus for policy frameworks to encourage the use of blended teaching. Indeed, measures should be put in place to inspire teachers to re-think and redesign courses that afford students more and different learning experiences than online or classroom alone.

In a related study, Kenney and Newcome (2011) described the challenges encountered and the strategies used in pilot testing a blended instructional method in a large class within the college of education at a medium-sized university. The results of the action research study and the issues and barriers encountered when implementing a new instructional strategy were discussed. The study revealed that blended learning allowed teachers to learn from other faculty using the approach and systematically assess and reflect on the adoption process using action research. Action research gave the instructor valuable information that they could use to modify the course design and implementation.

While the studies above highlighted important evidence on perceptions of learners and teachers on blended learning, the evidence is pre-COVID-19. It is imperative that this area is examined in the aftermath of the COVID-19 pandemic. The reason is apparent. Following the pandemic, ensuing lockdowns have seen academic institutions increase the pace and context of blended learning. Because of the recent emergence of the pandemic, studies on blending models of teaching and learning are still evolving. Some of the studies include Alsarayreh (2021), Bordoloi et al. (2021), Mahyoob (2020), Nijakowski et al. (2021), and Saboowala and Mishra (2021).

A related study by Bordoloi et al. (2021) examined the perceptions of both teachers and learners, in India, on BTL. The study also aimed at finding out the prospects and challenges of providing online/blended learning during and in post-COVID-19 situations. The study found that blended learning could be the solution for providing education in the context of 21st century India. However, unlike conventional education, open education has widened the scope of learning, adhering to the motto "Bring your own device" to learn. The extensive use of open educational resources, massive open online courses, social media, and meeting apps during the Covid-19 lockdown has opened the minds of the knowledge-hungry people. This has enabled them to receive the necessary educational inputs, training, and skills, even during the current pandemic. This will have a significant impact on the ways of educational transactions in the days to come.

Another positive study on the impact of blended learning on students is provided by Nijakowski et al. (2021). They assessed the effectiveness of blended learning in conservative dentistry with endodontics. Most respondents declared that their learning effectiveness increased during the pandemic. Most surveyed students preferred remote learning in asynchronous form (e-learning portals) to synchronous (virtual meetings in real-time). The results indicated that students were very satisfied with the proposed blended-learning model and would like to continue with it even after the pandemic has ended. Among the advantages, they

particularly mentioned the increase in efficiency and the individualised pace of learning. However, the downside was the limitation of social contacts. These findings show that while blended learning may provide substantial benefits, challenges indicated under theoretical literature are likely.

It is understandable that globally, research on COVID-19 impact on education is still in its early stages. Zimbabwe is not an exception. However, literature review on Zimbabwe has shown some areas of interest (see Chaora, 2020; Gavi et al., 2021; Moyo-Nyede and Ndoma, 2020; Rukasha et al., 2021). It is also evident that almost all schools, colleges and universities adopted BTL as part of other measures to deal with COVID-19.

Accordingly, the contribution of the current study is to assess lecturer and students' perceptions and attitudes towards BTL as well as challenges and opportunities posed by the Covid-19 pandemic.

CONCEPTUAL FRAMEWORK

Blended Teaching and Learning

Generally, scholars agree on the four predominant BTL models: rotation, flex, selfblend, and enriched virtual (Horn & Staker 2011; Krasnova & Shurygin, 2019). Each of these models offers a different dimension regarding the proportion of traditional FTF and online as well as the content within each category.

Rotation Model

In a rotation model, students rotate between offline traditional FTF classrooms and online environments (Ayob et al., 2020). Rotation models are intended to shift the learning between FTF and online according to a fixed schedule (Kennedy, 2021). Horn & Staker (2015) aver that the rotation model includes any course in which students rotate - either on a fixed schedule or at the teacher's discretion - among learning modalities. Literature has identified four sub-categories of the rotation model which are discussed below.

Station Rotation

In this sub-category, lecturers and students rotate between different teaching and learning methods, including one online learning station (Ayob et al., 2020). Other stations may include a few small groups or the whole class.

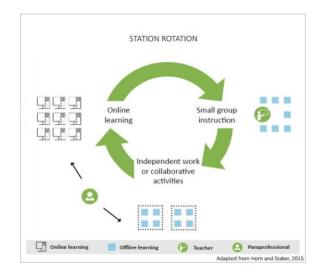


Figure 2.1: Station Rotation

Source: Horn & Staker (2015)

Lab Rotation

Lab Rotation is like Station Rotation, but the difference is that students go to a computer lab where the online learning component is covered (Horn & Staker, 2015). An advantage of lab rotation is that, it frees classroom teachers to focus on concept extension and critical-thinking skills rather than teaching and rehearsing basic skills (Ayob et al., 2020).

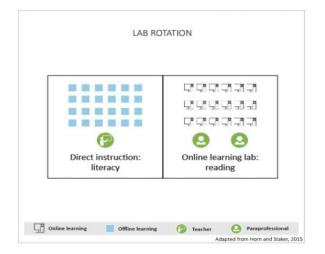


Figure 2. 2: Lab Rotation

Source: Horn & Staker (2015)

Flipped Classroom

In this model, learners rotate between offline traditional FTF learning at school and the delivery of content via online sources at home after school (Khader, 2016). In a classroom that is flipped, students consume online lectures independently.

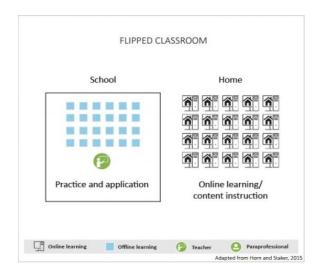


Figure 2.3: Flipped Classroom

Source: Horn & Staker (2015)

Individual Rotation

In this model, the teacher allows the students to rotate on an individually customised schedule among learning modalities (Laurillard, 2014). This is different from the other rotation models in that students do not necessarily rotate to each available station or modality. Instead, students' daily schedules are customised according to individual playlists. The result is a unique daily schedule for each student and lecturer.

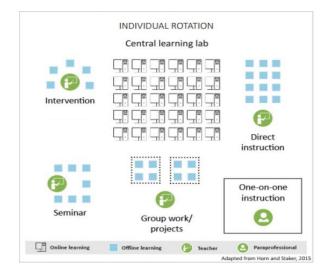


Figure 2.4: Individual Rotation

Source: Horn & Staker (2015)

Flex Model

In a flex model, online teaching and learning is the backbone for a given course. However, it permits students to use offline activities at times (Beaver et al., 2014). Usually, the lecturer is on-site, with students mainly learning on a brick-and-mortar for homework. campus, save some According to Owstern et al. (2008), personal tutoring and small group sessions will be carried out as and when required. FTF teachers are on hand to offer help, and mostly, they initiate projects and discussions to enrich learning, although in other programs they are less involved (Ho, 2016).

Self-Blend Model/ "A La Carte" Model

In this framework, learners cover one or more topics using the online platform with the aid of an online teacher as a complement to the offline traditional FTF teaching (Ayob et al., 2020). Students blend themselves by learning online individually and at schools with FTF teachers. Like other models, the use of self-blending teaching and learning increases after the introduction of rotational classes.

Enriched Virtual Model

For enriched virtual model, traditional FTF learning sessions are required, but students are allowed to independently complete the work online wherever they prefer (Ayob et al., 2020). For instance, students may be asked to meet physically on some days and can work independently on online lessons, whether on or off-campus.

Mixture of Blended Models

One clear observation from the characteristics of these approaches is that they are more similar than different. Given this, one is tempted to question whether these models can be "blended" to enhance learning. The answer could be yes, since Flipped Classroom can work along with Lab Rotation. In this arrangement, students learn online at home and then rotate to a computer lab during their scheduled on-campus sessions. Also, the Flex model can be matched with Enriched Virtual. Thus, mixing the blended models is ideal because it different accommodates populations of students in different subjects and circumstances under the same roof.

METHODOLOGY

This study is predominantly informed by the social constructivism paradigm and the approach is not particularly theoryoriented. In contrast to positivism, reality is precisely socially constructed. According to Poni (2014), the important thing for research is to explore how these social constructions happen. The focus is on the 'disclosure' of how social phenomena are socially constructed. As such, the method is rich and multi-faceted.

This study further adopted а qualitative research design based on its appropriateness. Akhtar (2016) posits that qualitative research is designed to help researchers understand people and the social and cultural contexts within which they live. According to Anderson and Braud (2011), studies seeking to examine person-centred holistic and humanistic perspectives to understand human lived experiences are best conducted using qualitative research. Thus, this research paradigm allows the complexities and differences of lecturers and students at a state university in Zimbabwe to be explored and represented.

As a practising lecturer, the most readily available population for investigation were peers and the students in the School of Commerce at the state university. Given that the university had seven schools and over 20 departments with varying areas of focus and specialisation, focusing on one school allowed the researcher to zero in on respondents with a common denominator. Also, unlike other schools, most commerce modules are difficult to teach and learn online as they require more demonstrations and practicals. The school has five departments, comprising 78 lecturers and 4 565 students and offers over 50 undergraduate and postgraduate degree programmes. A sample of thirty participants comprising male and

female lecturers and fourth year students was used. Purposive sampling was employed in participants. Purposive selecting the sampling is a method of sampling where the researcher deliberately chooses who to include in the study based on the ability to provide necessary data (Parahoo, 2007). This method was chosen because the researcher wanted to select participants who had the desired characteristics and information for the study. These students were exposed to the when the COVID-19 online learning pandemic hit.

The COVID-19 pandemic has changed the scope of every aspect of life, and research has not been spared. Hence, data from the respondents were collected using two collection instruments, which are online questionnaires and interviews, so as to limit physical contact with respondents.

The researcher followed a set of ethics in gathering data in this study. The primary ethical concern of informed consent was obtained from the respondents themselves and the established order as administrative permission. Lecturers and students agreed voluntarily to participate, and this agreement was based on complete and open information. Consent was sought from the respondents.

In addition, the respondents were assured of privacy and confidentiality and that information gathered was safeguarded against unwanted exposure, and was to be made public anonymously. Denscombe (2003) describes confidentiality as a contract to keep research-related secrets entered between researcher and the sources or informants. It is a contract requiring the researchers not to reveal information they acquire while working with the research participants.

FINDINGS AND DISCUSSION

Lecturers' Perceptions on BTL

The data from respondents show that the majority of lecturers were using online teaching methods before COVID-19-induced lockdowns, while a minority were using only FTF teaching methods. This finding implies that the concept of blended teaching is not new to the lecturers in the School of Commerce. Having observed this, this study was motivated to find out how the composition of blended learning changed during lockdowns when online platform teaching became a necessity. In appreciation of this study, the following questions needed to be responded to: Which online platforms were used pre-COVID period? Did that change during COVID-19 period? Answers to these questions where explained below.

Did Blended Teaching Change the Composition of Online Teaching?

It was evident that the lecturers in the school were already using online platforms to complement FTF methods pre-COVID-19. The least used platforms were Facebook and Skype, with the least votes. The most frequently used online platforms were WhatsApp and Email. Out of the six responses, the majority indicated that they were using WhatsApp while a few picked Email. Some respondents disclosed, during online interviews, that while email was a more official platform to interact with students, they used WhatsApp more because

of its convenience. The respondents shared that WhatsApp was more popular with students because it was relatively cheaper and user friendly than email. Since WhatsApp is a common social platform, students could easily check on any school However, from the findings, it updates. emerged that during the COVID-19 lockdown, there was a change in the preferences of online teaching platforms. Whilst WhatsApp remained popular among lecturers. its preference increasing tremendously, it is the number of preferences for Google classroom which was noticeable. Pre-COVID, only 2 respondents indicated using it against 4 during COVID-19. This represents a great increase in the use of Google Classroom.

The substantial increase in Google Classroom platform explains the effects of the state university's initiative to quickly embrace it as a special platform to ensure that teaching and learning continued during lockdown. Also, following the adoption of Google Classroom, the university embarked on a training programme in which lecturers were equipped with the skills to use it. Other online platforms remained at the periphery of use by the lecturers, with Facebook and Skype being entirely sacrificed for Google Classroom.

Did Lecturers Receive Necessary Technical Support to Enable Blended Teaching?

Lecturers were asked whether they were receiving technical support needed to enhance BTL. From the responses it is evident that very little support has been received. The majority of lecturers disagreed that they were getting necessary support. The interviewed lecturers revealed that although the university was strategic in facilitating FTF engagements, they did not get internet data bundles in time to facilitate online teaching. When the data bundles were eventually availed, it was too little. In addition, internet connectivity was poor, such that lecturers could hardly be connected on Google Classroom for two continuous minutes. This is in line with findings by Ayob et al. (2020), who documented that blended learning is usually let down by accessibility and affordability of online systems. Asked on their position, those respondents who agreed that they received support pointed to the Google Classroom training programmes they were subjected to.

Is Blended Learning Appropriate in the Teaching of Commerce Courses?

perceptions The the on appropriateness of blended teaching for commerce modules were also sought after. It was revealed, in the responses, that more than half of the lecturers agreed that blended teaching was appropriate for the modules they teach. This shows a strong positive perception on the use of blended learning. Only a few lecturers revealed that blended learning was inappropriate for the modules they teach. However, the number of lecturers who were indifferent was still high. This may explain the fact that some lecturers are still to adapt to, and realise the benefits of, online teaching methods and they can neither endorse nor denounce it.

The lecturers were asked to share why they thought that blended learning was

appropriate for teaching. A greater number of lecturers agreed that blended teaching was instrumental in achieving course objectives. This generally shows that most lecturers acknowledged the benefits of blended learning.

What is the Effect of Blended Teaching on Professional Development?

Responses on whether blended teaching helped lecturers' professional development were positive. The majority of the respondents acknowledged that blended teaching was enhancing their professional development. These arguments have been identified in studies by Szadziewska and Kujawski (2017) and Kavitha and Jaisingh (2018), who found out that most lecturers are benefiting from blended teaching.

Does Blended Learning Increase Students' Motivation to Learn?

Furthermore, the lecturers were asked to give their perceptions on the effect of blended learning on students' motivation and on whether blended learning should continue. The perceptions on the two aspects were in contrast. Close to half of the lecturers disagreed that blended learning improved students' motivation while a high proportion is indifferent. Only about a quarter of the respondents agreed that students' motivation has improved because of blended learning. The negative view on students' motivation may reflect the gulf between lecturers and students when it comes to their contact experiences with online teaching and learning. Despite most lecturers disclosing that they are not getting necessary backing to support online learning, they are obviously better than students. On the other hand, students could not afford to buy gadgets and internet data to support online learning. This discourages students from participating. In the eyes of lecturers, this can be mistakenly taken as lack of motivation.

Should BTL Approach Continue After COVID-19?

With respect to lecturers' take on whether blended learning should continue even after the COVID-19 lockdown, there is strong optimism. The majority of the respondents agreed that beyond COVID-19, blended learning should continue. Only a few thought otherwise. The optimism towards continued use of blended teaching even if normal learning systems are restored is a huge vote of confidence for the approach. Overall, lecturers are strong admirers of teaching blended methods. Follow-up questions from the interviews identified three major reasons in support of blended teaching. First, lecturers revealed that blended teaching nullifies the distance barrier. This is in line with discoveries by Jeffrey et al. (2014). Second, it was disclosed that with blended teaching, students are allowed to research more, work more independently rather than being spoon-fed, and they also learn time management. Third, one lecturer said, "It allows me to plan my work and lectures will be short, clear and concise which help the student grasp concepts easier and improve retention levels."

What are the Challenges of Blended Teaching?

Lecturers were asked about the challenges they face in delivering lectures

using blended teaching. It emerged that lack of necessary gadgets to support online teaching was considered as the biggest challenge to blended learning. On this matter, most of the respondents felt that the effect is strong while only a few thought the effect is negligible. The second and third biggest challenges were inaccessibility of internet bundles and poor internet connectivity. Also, the majority thought that low participation of students had a strong negative effect on blended teaching. Also noted was the effect of resistance to new teaching dynamics. A few of the lecturers confirmed that their resistance to new teaching dynamics has a strong negative effect on blended teaching.

What Should Be Done to Address the Challenges to Blended Teaching?

Although many suggestions were given, only two were more frequent. First, the lecturers suggested that the university must buy gadgets and adequate data for lecturers. In particular, they said they wanted new laptops. Some even argued that students should also receive data from the university and/or government. Second, others suggested that there is need for retraining, especially on the technical skills, in order to do away with the phobia of embracing online lecture delivery.

Students' Perceptions on Blended Learning

To draw out students' perceptions, several questions were also posed. Firstly, the students were asked whether they have been subjected to blended learning before COVID-19.

Were Students Subjected to Blended Learning Before COVID-19?

Responses showed clearly that blended learning was not a new phenomenon to the students. By numbers, the majority of the students who responded confirmed that they had been subjected to blended learning prior to COVID-19 lockdown. The next question was how the coming of COVID-19 affected the composition of online learning platforms. Most of the respondents shared their views on the platforms used before COVID-19. The majority of the respondents showed that they were subjected to Google Classroom. This contradicts the responses by lecturers, which showed that just above half used Google Classroom. A possible reason is that the students who responded feared that if they disclosed the truth, it would imply that they were resistant to the new online platform that the university had introduced. However, their preference for WhatsApp was explicit. A large number of student responses revealed that they were subjected to the WhatsApp platform. This is in tandem with the responses given by lecturers.

Did The Composition of Blended Learning Change During COVID-19 Lockdown?

Following COVID-19-induced lockdown, there was a notable shift in the online learning tools. It was revealed that the use of Google Classroom fell during COVID-19, while the use of WhatsApp increased significantly. While this might seem unusual, it may reflect an honest position for students. While the university adopted Google Classroom as the official online platform, students disclosed through interviews that WhatsApp was preferable because of its convenience and affordability. The increase in the use of WhatsApp led to reduction in the use of email. Over time, WhatsApp features were updated to allow sending of documents and videos, which was traditionally done through email. These results are in tandem with those of Matimaire (2020) who found that WhatsApp is more popular and acceptable by students.

Are Students Receiving Necessary Technical Support to Enhance Blended Learning?

On whether students are getting necessary technical support, more than half of the respondents indicated that they at least disagreed. Only a few of the students said they were receiving support and they shared that the university organised training on using google classroom. One student said:

> "Yes we participated in some training for google classroom. The university went on to post videos and documents on how to use google classroom. But as you are aware with the behaviour of students, most of us did not take the training seriously. Some did not even attend the training."

Is Blended Learning Appropriate for the Modules Taken by Commerce Students?

Consistent with the results that most of the students divulged, that they were not getting technical support towards blended learning, they were pessimistic on the appropriateness of blended learning. On this issue, about half of the students who responded indicated that they disagreed that blended learning was appropriate for their courses. Compared to lecturers' responses on this issue, it can be shown that students have a relatively negative perception on blended learning. However, a minority agreed that blended learning is appropriate. Also, a high number of neutrals indicated high level of indifference preference by students. Usually, adapting to change is difficult as some may resist it. When new methods were introduced, some students did not embrace the new normal. Yet, at the same time, the students realised that online methods were no longer options during the ongoing circumstances.

Does Blended Learning Improve Students' Participation?

In line with the objective to find out if blended learning improved students' participation, interesting results were obtained. There was no distinction between those who agreed and disagreed. The results revealed that the majority of the respondents agreed and almost a similar number disagreed that blended learning increased their participation. This reiterates the scepticism by students on blended learning. In addition, the proportion of neutrals was also high. It can be drawn, from these responses, that students' perceptions on blended learning was less optimistic. These findings relate well to evidence provided by Banci and Soren (2008), Yilmaz and Orhan (2011), Means et al. (2013), and Kintu et al. (2017).

Should BTL approach continue after COVID-19?

Also, students were asked whether they would be happy for blended learning to continue even if university operations were to revert to normality. Despite the scepticism that has been shown by students, more than half still suggested that blended learning should continue to be used. Only a minority were indifferent. This may be explained by the fact that the students were beginning to accept the demands of the new normal. Also, it implies that some of the students were laggards, who were beginning to appreciate that blended learning was becoming more indispensable in a dynamic world, even post COVID-19. However, a small number of respondents indicated that blended learning should not continue post-COVID-19.

What are the Challenges of Blended Teaching?

Although students responded on the challenges they were facing in blended learning, their biggest challenge was unavailability of internet services, with more than half of the students arguing that it strongly disrupted online learning. Unlike for lecturers, lack of technical support and resistance to change do not significantly inhibit blended learning, neither is lecturers' less frequent use of online platforms. Most students have more technical knowledge than lecturers, who are older and may adapt slowly to change.

CONCLUSIONS AND RECOMMENDATIONS

The research conclusions and recommendations are given according to the study's research questions and objectives.

Lecturers' and Students' Perceptions on the Effect of BTL Following University Closures Due to COVID-19-Induced Lockdown

Conclusion: From the results, it can be concluded that lecturers are more positive about BTL.

Recommendation: There is need to promote awareness amongst students on the benefits of blended learning during and beyond the COVID-19 pandemic.

The Effect of Blended Learning on the Composition of Online Teaching and Learning Platforms

Conclusion: Following the COVID-19 induced lockdown, the use of Google Classroom by lecturers increased, while it decreased slightly for learners. However, WhatsApp was the most popular online teaching and learning platform pre-and post-COVID-19 lockdown.

Recommendation: While WhatsApp is not recognised as an official online teaching and learning platform, it has the best convenience. The university is advised to develop its own online teaching and learning platform which brings a good balance of traceability, convenience, and affordability.

Appropriateness of BTL for Commerce Courses

Conclusion: Most lecturers see blended teaching as being appropriate for the modules they teach. A significant number of students think it is not, though some are indifferent. **Recommendation**: There is need to relook at the composition of FTF and online teaching and learning. Currently, the time for FTF is not adequate, hence this must be increased.

The Effects of Blended Learning on Lecturers' Professional Development

Conclusion: Blended teaching promoted lecturers' professional development.

Recommendation: Lecturers who successfully train for online teaching methods should be given certificates of competence.

The Effects of Blended Learning On Lecturers' Motivation To Learn

Conclusion: Most students' motivation is not helped by the blended learning model.

Recommendation: There is need to develop more youth-friendly online learning platforms. There is also need for increased awareness on the need for, and benefits of, blended methods.

Challenges and Opportunities Associated with BTL

Conclusion: The major challenges to BTL are lack of technical support and access to internet services.

Recommendation: There is need to provide both lecturers and students with gadgets and internet devices. As for students, there is need to create "UNIVERSITY WIFI ZONES" in cities, towns, and growth points where students can visit to access internet services.

Area of Further Research

It is hoped that the current study has made an important contribution to literature on the impact of COVID-19 lockdowninduced school closures and education at large. However, a lot of research is needed to probe more solutions to the effects of COVID-19 in the education sector. In particular, the current study only covered a single school at just one university. To come up with more concrete evidence, it would be more convincing to include all universities in the country. The rationale for a country-wide study is that it will allow the capturing of idiosyncratic effects. These arise due to heterogeneities associated with each university's niches.

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