TEACHERS AND LEARNERS' EXPERIENCES OF IMPLEMENTING BLENDED LEARNING DURING COVID-19 PANDEMIC LOCKDOWN IN MANGWE DISTRICT, ZIMBABWE

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ABSTRACT
Implementation of blended learning should be characterised by an array of strategies for effective instructional delivery to take place in the classroom. Hence, this study sought to explore the experiences of teachers and learners on implementation of blended learning in Mangwe District Secondary Schools, Matabeleland South Province during the COVID-19 pandemic lockdown. This qualitative study was hinged on the interpretivist paradigm and employed a case study design. The participants who comprised eight teachers and twenty-four learners were purposively sampled from four secondary schools. Data collected through semi-structured interviews and focus group discussions were thematically analysed. The findings indicated that the flipped classroom, self-blend and flex approaches were mainly used to implement blended learning during COVID-19 pandemic lockdown in selected schools. The study further found that these strategies were implemented through the use of WhatsApp social media platform. The study concluded that in spite of the challenges encountered, selected schools made efforts to ensure that blended learning was implemented through the cited strategies. The study recommended that the Ministry of Primary and Secondary Education should capacitate teachers on various learning management systems and online assessment tools through in-service training sessions to support implementation of blended learning.

Key Words: Blended learning, COVID-19 pandemic lockdown, online tools, learning management systems.

1. INTRODUCTION
The coronavirus disease of 2019 (COVID-19) pandemic induced lockdown changed the structure and processes of educational institutions in a bid to provide education to learners worldwide. Schleicher (2020) states that governments worldwide have been alternating contact lessons with online lessons as a way to avoid total curriculum disruption during COVID-19 pandemic lockdown. Schleiner further points out that most governments introduced technology-based pedagogy to ensure that learners have access to learning materials while staying at home. Kiran (2017) defines this blended learning as a technology-based teaching system that integrates face-to-face teaching approach with online learning systems. This perception of blended learning is in sync with Mpofu and Mpofu (2023) who noted the need to incoperate fourth industrial revolution tools that combine elements of e-learning with the traditional classroom environment. Such strategies should place the learner at the centre of quality education during such disruptions. Mpofu and Mpofu further explain that in some situations, blended learning may involve learners completing online units prior to meeting physically to ensure they share a common foundation of

knowledge. Thus, the understanding of how the quick implementation of e-learning was initiated is ideal to inform how post pandemic strategies can be modelled in the future to build a resilient education sector. Winkler (2020) adds that e-learning elements can be used in after class meetings to maintain an ongoing dialogue among a community of participants about course-related topics through chats or discussion board postings. It has been observed that other blended learning options may use a combination of pre-class and post-class e-learning components. As a result, several strategies coupled with online tools exist to implement blended learning.

2. BACKGROUND

McCarthy (2020) argues that the function of schools is to offer uninterrupted education to learners. Pace (2020) indicates that the emergence of the COVID-19 pandemic caused a disruption of learning worldwide with schools halting the physical contact lessons with learners so as to contain the novel virus. Pace further notes that valuable insights were drawn to develop and enhance blended learning approaches as a response to the COVID-19 pandemic induced lockdown. The blended learning approaches were viewed as effective alternatives to teaching and learning during traditional learning disruptions.

In an effort to implement blended learning in the education system, on the 4th of May 2020, the Zimbabwe Education Cluster released a strategy called the Zimbabwe COVID-19 Preparedness and Response Strategy in response to the emergence of COVID-19 (Ministry of Primary and Secondary Education, 2020). The strategy proposed an immediate look into alternative online teaching methods, teacher capacitation and awareness for cross cutting issues brought about by COVID-19 pandemic. Furthermore, on the 24th of March 2021, the Ministry of Primary and Secondary Education (MOPSE) released a policy document called the Strategy for Equitable Provision for Inclusive Continuous Quality Learning at All Times and During Emergencies, to deal with learning during emergencies.

According to UNESCO (2021), schools in Zimbabwe remained closed for almost a year, affecting 4.6 million learners and 139,596 primary and secondary school teachers. UNESCO advances the idea that most public schools do not have the capacity to manage distance or online learning as teachers are not equipped with knowledge and skills to deliver remote learning coupled with lack of infrastructure and resources to sustain online learning. The teacher capacitation programme was done via the WhatsApp social media platform and was meant to offer adaptive capacities for teachers to support learners' learning using remote methods of teaching that include radio, digital and print materials at home. MOPSE (2021) adds that the teacher capacitation workshops were divided into three modules focused on high-technology, low-technology and no technology tools. This was after the realisation that most teachers in Zimbabwe have no access to high-technology hence the need to equip or sensitise teachers on low technology tools for deploying lessons and assessing learner competencies. Various methods of teaching learners remotely were explored, including hybrid or blended learning approaches, relevant for the Zimbabwean context. The objective of the programme was to equip Zimbabwean teachers with skills and resources to deliver different forms of remote learning. UNESCO in collaboration with MOPSE trained twenty teacher trainers on the first module which introduces the concept of open distance learning and online learning, participatory teaching methods and various tools including WhatsApp, Moodle and Google Classroom. Teachers trainers were also trained on creation of learning materials under the

creative commons licence for use by teachers and learners and in turn the trainers capacitated 1500 teachers across the country (UNESCO, 2020).

In a bid to further strengthen learning during COVID-19 lockdown, MOPSE launched an online data repository called the Zimbabwe Edu-connect, with the aim of supporting both teachers and learners to implement blended learning (MOPSE, 2020). The repository was set to collect and hold teaching and learning materials right from Early Childhood Development level up to secondary form six level. The realisation that most learners have no access to textbooks and reading materials prompted MOPSE to create the repository (UNESCO, 2020).

Despite the attempts by MOPSE and other stakeholders to provide a variety of tools for blended learning, it was observed that many teachers delivered lessons largely through the WhatsApp platform than any learning management platform. Additionally, most of the teachers struggled to teach using online platforms during COVID-19 lockdown. For that reason, the researchers found it prudent to explore the experiences of teachers and learners on the strategies used to implement blended learning during COVID-19 pandemic lockdown. The following research question guided the study:

How were blended learning strategies used in Mangwe District Secondary Schools during COVID-19 pandemic lockdown?

3. METHODS

The study was qualitative, based on the interpretivist paradigm with a case study design. A qualitative study can be used to assess personality variables such as attitudes and opinions about events, individuals or procedures. This process of research involves emerging questions and procedures that look at data typically collected in the participant's setting as well as employing data analysis inductively building from particulars to general themes and the researcher making interpretations of the meaning of the data. Creswell (2014) states that qualitative approaches in general permits the researcher to discover reality directly from participants without having to fit it into a conceived theoretical perspective. Creswell adds that the holistic perspective taken by qualitative researchers is important for understanding the complex nature of many aspects of human and organisational behaviour. The qualitative research was ideal as it involved rich descriptions of perceptions, feelings, and opinions to better understand the actions of all participants studied

 The theoretical framework used the constructivist theory of learning. This learning theory contributes to understanding both the construction of and relationship between curriculum and events thus ideal in exploring how blended learning strategies were used during COVID-19 pandemic lockdown. Consequently, according to Woolfolk (2012), the theory resonates well with blended learning during COVID-19 pandemic in that it allows learners to be immersed in technology and platforms that create experiences where learners can create their own meanings and discover knowledge on their own.

Kim (2020) states that the interpretivist paradigm has the belief that reality is multi-layered and complex and a single phenomenon can have multiple interpretations hence the idea behind interpretivism is to analyse data such that the subject's worldview, perceptions, feelings and

experiences remain unchanged. In exploring the experiences of teachers and learners on implementation of blended learning during COVID-19 pandemic lockdown, the interpretivist paradigm was ideal in that it allowed the research to understand the implementation of blended learning through the study participant's point of view, experiences and perceptions. Thus, Johannes (2020) therefore suggests that the interpretive paradigm study takes the chosen course of action toward the subjective end of the participant's multiple perspectives in connection with the researched phenomena as viewed and understood by the participants.

Participants were purposively selected comprising eight teachers and twenty-four learners. Data was collected through interviews and learners were placed into four focus group discussions which were conducted online. Data collected was transcribed and thematically analysed. The issues of credibility and trustworthiness were complied with through a sustained engagement. Ethical considerations included obtaining informed consent and maintaining privacy and confidentiality by using pseudonyms during the carrying out of the study. Permission was sought from parents and guardians of learners for them to participate in the study. To conceal participant identities, the following coding were used; ST1-ST2 (Teachers in school 1), ST3-ST4 (Teachers in school 2), ST5-ST6 (Teachers in school 3), ST7-ST8 (Teachers in school 4) and FGD1-FGD4 (One Focus Group Discussion for learners per school).

4. RESULTS
4.1 Strategies used in the implementation of blended learning during COVID-19 pandemic lockdown
The research solicited for the different strategies that teachers used in the implementation of blended learning during COVID-19 pandemic lockdown. The responses are presented under the strategies evolving around the flipped strategy approach, the flex/La Carte strategy approach and the self-blend strategy approach.

4.1.1 Flipped strategy approach
Participants were tasked to identify the strategy that they used to implement blended learning during COVID-19 pandemic lockdown. One of the strategies identified based on its characteristics and perceived similarities of operations is the flipped strategy approach to blended teaching and learning. The following are some of the responses on flipped strategy approach:

This is a method of teaching where part of the lesson is carried out during online lesson and some part of the lesson is done face to face. (ST5)

Part of our lessons were done online and the teacher would explain and summarise what we learnt when we go to school physically. (FG5)

So, I had to send notes and exercises online and when they come back to school on the days that they were given, we redo or we revisit that topic then we move on. (ST5)

Participants were also asked how the online component of blended learning was implemented using the flipped strategy approach. The participants' responses revealed that teachers would give some concept elements to learners online which would be completed during the face to face interaction. The learners through Focus Group 1 slightly differed in that they felt the online

component under the flipped strategy approach was more of receiving notes than a lesson and actual lesson delivery was handled through the face-to-face lessons.

When asked how the face-to-face lessons under the flipped strategy approach were implemented, participants revealed that during the face-to-face lessons, the concepts covered during the online lessons were practically repeated albeit with a paced lesson. Where it is discovered that learners did not understand concepts during the online component, the lesson is completely repeated during the face to face component. The repeating of concepts was also mentioned when participants were asked on the modifications that teachers used on the strategy. The teachers stated that they had to repeat some concepts or the whole topic depending on whether learners understood or not during the online component. The following responses show this trend;

Yes, instead of moving on with the topics that were covered during online lessons these were fully revisited during the face to face component. I realised that learners were having too much grey areas on concepts that were done using online lessons. Besides, not all learners attended the lessons because we were requesting the learners to pay for these online lessons. (ST5)

My parents paid only for Mathematics, Science and Geography so those are the only subjects that I was doing online. (FG4)

The above responses show that part of the reason that caused teachers to repeat lessons carried out through the online component was that not all learners attended the online component. After teachers failed to get data assistance from their schools, teachers personalised the online component and struck an arrangement with parents for payment of these online lessons. Hence only those learners whose parents were able to pay teachers would attend the lessons. The responses also show that this trend where only learners who had paid attended online component was corrected when schools started alternating one day of face to face to one day off school.

4.1.2 Flex strategy approach

When participants were asked if they used the flex strategy approach and its implementation, participants had this to say;

The flex strategyy is where there is the use of more online lessons that learners do at their own pace while the teacher does the monitoring and then there are occasional lessons using the face-to-face method. I think the most important thing about the flex method is that it is too fluid and flexible in its implementation. The flexibility of the flex strategy was the reason why I chose this strategy to deliver lessons during COVID-19 pandemic lockdown. (ST1)

I actually checked the circumstances that were prevailing at the time and actually responded to what I thought was adequate to address the situation. My understanding of the flex strategy is that if I am using online resources, I use them or if there is need to come back in the classroom and explain those, I then use such but using both online and offline as need arises simultaneously together. (ST2)

I think there is no one strategy that we can say we implemented because if you look at the first time when the lockdown was implemented, face to face lessons were not allowed and this was followed by a directive that online lessons should start and this is the time when the radio lessons were implemented by the government through the Ministry of Primary and Secondary Education. This means that during time we can say the flex strategy was used because during that time there was more of online lessons than we can talk of any face to face lessons. Then there was a time when learners or schools were alternating between face to face and online lessons. Although the enriched strategy suggests lessons be alternated in blocks what was happening in schools was closer to that although in this instance lessons were being done with one day in and one day out as opposed to a block as a block would have several days in succession for face to face and several days also occurring for online lessons. (SH2)

From the responses above, the participants felt that one of the strategies that they used was the flex strategy based on the fact that there was a period that was characterised by more online than face to face lessons and learners would take their time to complete tasks given as the online lessons were not done on a daily basis. However, some of the responses indicated that some of the characteristics of the strategies overlap although overall, one can determine which strategy the characteristics that were obtaining during the implementation are inclined to.

4.1.3 Enriched virtual strategy approach
The study participants were asked if the enriched virtual strategy approach was used during the COVID-19 pandemic lockdown. Participants did not identify the enriched virtual approach as having been used during the COVID-19 pandemic lockdown. This is what the participants had to say;

While the enriched strategy uses a balanced face to face and online lessons, the situation under COVID-19 pandemic lockdown detected that there was more of online component at one time than the face to face component. Besides, these lessons were not done in blocks as the enriched strategy detects. (ST1)

I do not feel this was a strategy used at this school based from your description of it. (ST2)

When learners would alternate coming to school, it was not meant to facilitate face to face and online component, but rather it was a strategy to decongest schools as a way of preventing the spread of COVID-19 by making sure there is a manageable number of learners at school at any given time. (ST6)

All participants had the feeling that the enriched strategy approach was not used in the implementation of blended learning during COVID-19 pandemic lockdown. From the participants' point of view, it came out that the only slight resemblance to strategies used was the fact that the enriched virtual strategy uses blocks of face to face followed by blocks of the online component. The responses revealed that when learners in different forms alternated attending to school, it was a way of decongesting schools more than creating time for online component.

4.1.4 Laboratory rotation strategy

When participants were asked on the use of the laboratory strategy approach, the participants indicated that the strategy was not used to implement blended learning during COVID-19 pandemic lockdown. This is what the participants had to say;

> *We do not have computer laboratories at our school to use as learners.* (ST1)

> *Here there are no computer rooms to make that strategy work.* (ST7)

> *Like I mentioned, I feel that I only used the flex strategy approach.* (ST3)

The participants' responses indicated that the laboratory rotation strategy was not feasible since participants revealed that their schools had no computer laboratories that could be used as resource centres for learners to implement blended learning during the COVID-19 pandemic lockdown.

4.1.5 Self-blend strategy/La Carte Strategy

The last approach to blended learning that the participants identified as being used during the COVID-19 pandemic lockdown is the self-blend/La Carte approach. Participants pointed out the following when asked if self-blend was used in the implementation of blended learning during the COVID-19 pandemic lockdown:

> *This strategy was not used as a standalone strategy but was fused into the flipped strategy approach. I would give learners an online address to a portal or website that learners have to visit and carry out self-learning by interacting with the materials on the given site.* (ST1)

> *Yes, there is a way of designing lessons in such a way that you send learners to a link and say go and read this topic from this particular area after noticing that it is what is required in the syllabus. At times I will just send a google form of a lesson with structured questions that they can answer.* (ST2)

> *The self-blend I have to say that it is handy to take off a load of work from the teacher for a while. It can be used to reinforce a concept, so yes I use it from time to time but not as a main strategy for teaching as children need constant guidance which is not available when learners pursue learning using self-blend."* (ST3)

> *Yes, there are sites that we were given by teachers to go and read or to take notes from.* (FG1)

> *I consider the frequent use of those online links that we give to learners as a way of practicing the self blend strategy. They are quite some instances where I directed my learners to visit a site or so as to cement the concepts that would have been covered during either the online lesson or the face-to-face lesson.* (ST4)

> *There are very few occasions where we were asked to learn on our own online. As learners we are not usually surfing the internet because we usually have data for WhatsApp not for the internet, we do not afford the data.* (FG2)

The above assertions clearly show that the self-blend approach was only used as a complimentary strategy to other strategies that were used to implement blended learning during COVID-19 pandemic lockdown. The participants further noted that the strategy was implemented to lift some work off the teacher's load. The participants felt that the self-blend strategy was not adequate to be used as a sole core strategy in implementing blending learning since learners would require constant monitoring to ensure that the tasks given using the self-blend approach are carried out by the learners. These assertions indicated that the self-blend approach is appropriate for learners who are intrinsically motivated and are self-driven with an urge to learn.

Participants were asked on who decided on the portals or sites to be visited by the learners during the self-blend strategy. All participants felt that the teacher was responsible for choosing which site to visit. The reasons given were that the teacher would have vetted the site before to ensure that the site has the right content, adequate and proper for the level taught and that the site will further cement or introduce concepts that are targeted by the teacher. The participants further revealed that schools do not have any standard recommended sites for any content or for any level as the discretion was left to the teacher to decide.

5. DISCUSSION

The findings of the study revealed that the flipped strategy approach was not predominantly used in the implementation of blended learning during COVID-19 pandemic lockdown. It was also revealed from the study that the flipped strategy approach allowed learners to be exposed to lesson materials before the face-to-face component resulting in a richer interaction when the face-to-face lessons occur. The results showed that teachers spent less time introducing a new topic to learners as they would have interfaced with the content of the topic prior to attending face-to-face lessons. This increased the chances of deeper understanding of concepts among learners as well as giving learners ample time to develop questions that the teacher may have to attend to during the face to face lessons. This finding is in line with Blazenka, Bart, Francisco and Petra's (2022) study in Croatia who found that the flipped strategy approach created a much deeper understanding of concepts as compared to the other strategies.

It was revealed that the flex strategy approach was mainly used circumstantially as a result of the suspension that was effected at the onset of the COVID-19 pandemic lockdown. The study discovered that since teachers could not hold face-to-face lessons during the first part of the suspension, the flex strategy approach became operational by default where teachers had more of the online content than the face to face component. The study further revealed that some elements of the enriched strategy approach were fused into the flex strategy approach. It also emerged from the study that teachers incorporated some elements of the self-blend strategy approach within the flex strategy. These findings are in line with Verrecchia and McGlinchey's (2021) finding in Pennsylvania that some characteristics of other strategies can be borrowed and fused into the flex strategy. It was further found that the flex strategy approach appealed to most participants due to its operational flexibility, its inclination to more online learning than face to face as well as liberty for learners to use their own pace. The study also found that the online component of the flex strategy was carried out solely through the WhatsApp social media application. This finding differs from Fleming's (2021) study that found that American schools used different learning

management systems in implementing blended learning using the flex strategy during the COVID-19 pandemic lockdown.

The study indicated that the enriched virtual strategy approach was not used to implement blended learning during COVID-19 pandemic lockdown. This finding is contrary to the findings of Tanga, Ndhlovu and Tanga's (2020) study that the strategy was used in South Africa where it was modelled as bursts of online blocks followed by blocks of face-to-face lessons.

The results of the study also indicated that the self-blend/La Carte strategy approach was not used as a standalone strategy. It came out from the study that teachers fused the La Carte strategy with other strategies that were used, namely the flipped strategy approach and the flex strategy approach. Teachers used this self-blend to take off some load and divert it to the learners to cover on their own. The study also revealed that the self-blend learning was not initiated by the learners as is the strict characteristic of the self-blend, rather, teachers initiated the self-blend, decided on the sites and portals to be visited as well as the content to be covered.

6. CONCLUSION AND RECOMMENDATIONS

The study explored the experiences of teachers and learners on the strategies used to implement blended learning during COVID-19 pandemic lockdown. The study evolved around strategies such as flipped, flex, enriched virtual, laboratory rotation and self-blend/La Carte. The study concluded that despite the measures taken by Ministry of Primary and Secondary Education to train teachers on use of online tools and their application in instructional delivery, some teachers still lacked capacity to implement blended learning. The study also concluded that only the flipped, flex and self-blend strategies were used to implement blended learning during COVID-19 pandemic lockdown. The study further concluded that teachers lacked skills and knowledge about conducting meaningful lessons using online platforms and online tools, with majority of teachers using the WhatsApp platform. However, the study concluded that in spite of the challenges encountered, selected schools made efforts to ensure that blended learning was implemented through the cited strategies. Hence, the study recommended that the Ministry of Primary and Secondary Education should continuously capacitate teachers on various learning management systems and online assessment tools through in-service training sessions to support implementation of blended learning. Schools should support implementation of blended learning by conducting workshops to equip teachers with requisite knowledge and skills required for blended learning instructional delivery.

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