

Pandemics shifting pedagogy: Readiness for blended learning in Zimbabwean secondary schools

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Abstract

The wave of innovation and technological advancement affecting the field of teaching and learning has necessitated the adoption of strategies that make education not only productive but enjoyable and satisfying to the receiver. The achievement of learning 'anywhere, anytime' through online and blended education is a milestone particularly for adult learners, who would gladly enjoy flexibility and solitary engagement due to their packed life exploits. But emergency situations have also proven as a force to influence the adoption of new strategies when there would be no option but to abandon traditional face-to-face learning encounters. A number of pandemics in history have left a few lessons for countries and educational establishments on how to combat disruption in schooling for young learners especially those from poorly-resourced family backgrounds who depend on public service delivery for social guidance and self-improvement. This paper explores the conviction that Zimbabwe should ready itself for effective use of the much acclaimed online and blended learning pedagogy, steadily and purposefully in times of quiet and stability, in preparation for disruptions of the magnitude of those experienced during the COVID-19 global pandemic between 2020 and 2023. The paper is grounded on the qualitative study featuring views and experiences of secondary school learners caught up in the abrupt responses to alleviate the severe impacts of the said pandemic on their accustomed schooling. The study interrogates learners' insights on selected issues of concern in promoting the adoption of the online and blended learning pedagogy, namely: technical challenges, learning challenges, frequency of learning, curriculum and content coverage, and improvement of learning. It is established that challenges exist and persist, but are not insurmountable. It is recommended, among others, that national administrations and school systems should accept technological change to the full and respond decisively in all situations. There should be deliberate formalisation and regularisation of responsive learning pedagogies to incorporate online methodologies in teaching and learning at schools.

Keywords: Blended learning Online learning, Pandemic, Pedagogy

1. INTRODUCTION AND BACKGROUND

The recent incidence of the corona virus pandemic shook and changed the world, “normalcy” became a distant memory as the disease ravaged entire continents with the reality of blanket lockdowns becoming the norm. Instantly, authorities were faced with hard decisions on what to do about school learners suddenly confined to their homes. With face to face lessons impossible, many countries turned to some form of online learning, a fairly unfamiliar avenue for schools. This paper, reflecting on the experiences during and after the said period, explores the extent to which the Zimbabwean education architecture is prepared for shifts in pedagogy to blended or fully online learning programmes in the event of similar outbreaks. Blended learning is defined by Ofsted (2021) cited in Johnson & Coleman (2021) as a mix of face-to-face and online methods. To this end, this paper explores the experiences of secondary school learners during COVID-19 pandemic imposed lockdowns based on questionnaire and interview responses given by O’ level learners in July 2022 who are in line to write their terminal examinations in November 2022. The research focuses on learner resource availability and constraints, learning applications used, knowledge and skills in using online teaching and learning gadgets, and areas for improvement identified by learners. This is in order to use their experiences to gauge the extent of preparedness in rolling out online learning programmes in future and proffering recommendations on how to improve where lacking.

While the Covid-19 is not the worst recorded pandemic in history, its impact was widely popularised, taking place in the globalised modern world. Its potency was also relatively high, spreading profusely within months to almost all countries of the world. The resultant strict lockdowns signalled, among other consequences, the closure of virtually public spaces such as schools during the critical period which turned out to be six continuous months. To alleviate the inherent disruptions, some teachers and learners began to integrate online inclusions instantly or gradually into their erstwhile face-to-face dominated teaching and learning schedules.

Online learning has been around for a while as a learning avenue in some limited form, way before the corona virus pandemic. It is a form of specialised remote or distance learning employing a variety of integrated communication technologies, and often embracing virtual learning approaches. Its implementation has largely been selective and sporadic due to a variety of factors such as inequalities in procuring gadgets and accessing digital media between learners (Fujii, et al., 2020). Johnson & Coleman (2021) put it as schools being varied in their levels of preparedness or capacity. In affluent countries such as the United States of America (USA), a report by the Office for Civil Rights (OCR) pointed out that the pandemic deepened divides in educational opportunities that were already in existence before it (OCR, 2021). This mimics the conditions obtaining in Zimbabwe when the pandemic hit where readiness for adoption of this alternative mode of learning was not the same for different institutions because of socio-economic factors (Nhatuve, 2021). Everything therefore points to a less than ideal situation prevailing on the ground when the pandemic hit. Online learning also requires learners, especially more mature ones, to shift towards solitary, individualised, and self-directed learning habits, a demanding feat for the average learner.

Disrupted school attendance tended to prejudice learners from low income communities (Kraft, et al., 2020). Parents had to take up roles to supervise and support learners now confined to their homes. Generally, parents are not educators and are therefore not equipped to support and supervise their learning children (Bozkur, et al., 2020; Mukute et al., 2020). Neither were they adequately educated themselves. A study by Contini, et al. (2021) found that learner achievement was more negatively impacted on well performing learners with lowly educated parents. For students, the effect was the same. According to Nhatuve (2021), less than a quarter (23%) of students in one surveyed institution of higher learning reported a

satisfactory prior exposure to online learning mainly as a result of communication challenges. This percentage could be even lower with secondary school learners as they are teenagers with shorter attention spans.

Besides the pandemic directly impacting on children's learning, learner outcomes through social disruptions such as parent's loss of employment, lack of co-curricular activities, deaths of relatives due to the pandemic and crowded homes due to lockdowns came into play (Contini, et al., 2021). At the same time, 98 world countries reported a large number of learners in the 13-18 age group lacked a quiet place for studying in their homes, especially in poorer households (OECD, 2020). Whereas classrooms provide a controlled environment for optimum learning output and internalisation of new concepts, households are generally ill-configured for prolonged and effective learning, including self-directed learning. For learners to benefit from online learning in the homes, parents and household members must therefore create the requisite conducive environment, such as honing learners' digital skills, tools and other resources (Mascheroni, et al., 2021). These requirements may not be easily available and replicated in every household, hence many learners consider the change to online learning as negative (Tejedor, et al., 2020). In the literature, this is one of the most difficult things to achieve i.e. providing a standardised environment and background in every household to do away with family specific challenges for different learners.

In Zimbabwe, a survey by eLearning Africa/EdTech Hub on behalf of UKAid (2020) found that the curriculum in place when the pandemic hit was not suited to distance learning. As a result, teachers that did embark on some online learning most likely changed sections of the content taught by dropping some content such as practical skills (Johnson & Coleman, 2021). Such content simply does not translate well in a medium such as online learning because of household centric challenges alluded to earlier as well as the need for thorough supervision and technical knowhow in the case of science practical experiments. Teaching and learning online also has other documented limitations such as inability to accurately gauge student learning, while prolonged periods in front of the computer screen and social isolation also has implications on teacher wellbeing (Johnson & Coleman, 2021). Thus, negative effects of online learning were not just confined to learners but also to classroom practitioners. Further evidence of this is shown by the fact that the shift to virtual learning also brought about clear demarcations in the abilities of different teachers in this digital age. This was revealed in a study by Kraft, et al. (2020) which found that teachers in different career stages struggled in different ways with the shift to online learning. Mid-career teachers would most likely be surrounded by family, hence balancing professional responsibilities and obligations at home would be a struggle for them, while veteran teachers would mostly be uncomfortable with emergent technology use.

Despite the myriad of challenges highlighted, online learning naturally does have positive outcomes for some learners somewhere. For example, it is transacted anytime anywhere, it does away with the need to commute to work hence saving time (Kozarenko & Skakunova, 2021). This allows for more time for other activities such as lesson preparation for the teacher, rest or leisure for everyone. Also, online learning allowed for a fair deal of education continuity despite the disruptions (Bozkur, et al., 2020). This is important especially when looking at the durations of some of the lockdowns in Zimbabwe where they amounted to three terms over two years when combined from 2020 to 2021. Losing a whole year of schooling cannot be sustainable when looking at national development goals hence remote learning goes some way into addressing that. It is now well accepted that since technology has transformed educational processes, with contemporary approaches to education becoming more student centred, knowledge acquired via technological means such as e-learning assists learners to manage their own education (Hoq, 2020). This means that online learning may advance

modern teaching methods which put the learner at the forefront of knowledge acquisition and not the teacher.

The COVID-19 pandemic warranted that teaching and learning were to be carried out through the use of the internet in order to limit contact between people (Christianto & Kristina, 2022). The rapid spread of the virus compelled swift action by world leaders to halt phenomenal death rates (Onyema, et al., 2020). This had a far reaching impact on everyday life routines and administrative processes (UNDP, 2020). Government expenditure rose against depleted incomes (Salmi, 2020).

In the three years at the peak of the pandemic, the majority of learners had disrupted face-to-face school attendance, incorporating the sitting of pen-and-paper examinations and other assessments. This was where the use of blended learning would come in handy. Blended learning is conceived as the ideal combination of, and intermediary between, face-to-face and online learning (Fig 1). Assessing the country's readiness for online and blended learning programmes therefore becomes of paramount importance as a technological advancement in learning delivery, as well as in order to plan for and anticipate potential problems in future pandemic-induced lockdowns. This is because these periods usher in a "new normal" for their duration hence adaptations to them are essential. Since the shift to online learning disproportionately affected some vulnerable social groups, it is essential to consider how the pandemic will affect their future academic route as well as social outcomes.



Fig 1: Simplified hierarchy of learning modes

The main aim of the study was to assess the country's readiness and ability to roll out blended learning programmes should lockdowns be necessary in future.

The objectives of the study are:

- To examine the challenges that hinder blended learning successes during lockdowns and in improved learning situations.
- To identify areas for improvement and interventions to improve future learning experiences during lockdowns.

2. METHODOLOGY

This study employed a qualitative research paradigm which allowed the researchers to explore phenomena from personal experiences (Viscu, 2012). Data collection and analysis were done concurrently to necessitate effective interpretivist approaches (Makombe, 2017). A case study approach within the interpretivist research methodology was chosen to reinforce participants' interest in the unfolding application of online learning. The in-depth case study of the prevailing activities and the thoughts around them served to identify possible areas for improvement in terms of enhanced efficiency (Kumar, 2011). The study was carried out at a rural boarding school in the Insiza district of Zimbabwe, which happened to enrol learners coming from both urban and rural home backgrounds. Two levels of purposive sampling were performed, starting with sampling from a stream of about 207 form four learners to obtain one full class of 43 learners. These were given very brief questionnaires to ascertain if they had taken part in any online learning programmes during the COVID-19 induced lockdowns, and reasons if they had not. This was then followed by "typical case sampling" of ten learners, where those who indicated that they had taken online lessons were then engaged in spatially separated interviews in order to delve deeper into their experiences. This was because typical case

sampling would allow selection of positions that were normal and expected to provide detailed profiling from other data collection instruments such as questionnaires (Ritchie & Lewis, 2003). The learner responses for both the questionnaire and interview questions were then thematically analysed in order to come up with common responses. Strongly expressed views that align with generated themes will be reproduced verbatim in the results. The identification of participants used the codes L1 to L10 to denote each learner interviewed.

3. RESULTS

The questionnaire data revealed the general demographic and theme-specific information about the respondents. Their age groups ranged from 15 to 17, with 23 boys and 19 girls while one did not specify. Of the 43 respondents, 24 had embarked on online learning while 13 had not had any lesson during the period under review. Six respondents had risked law enforcement and the threat of contracting COVID-19 by attending private or small-group face to face lessons with their tutors. The reason given by the 13 who did not embark on extra lessons was lack of money and being in the rural areas when the lockdown started, as two participants put it:

Participant 1: I was at the rural areas and I could not learn online because I had no data to use WhatsApp.

Participant 2: My family thought it (the lockdown) was for a short time and I had no gadget at that time because there was no money.

Technical challenges

The learners here expressed a wish to have embarked on online learning, but resource constraints had prevented them especially lack of resources. Respondents who did have online lessons, that is, 22 out of 24, reported that they used the social media platform WhatsApp for their lessons. A study by Bhamani, et al. (2020) found that this medium, among others, was used in many countries to ensure communication between teachers and learners hence facilitating continuity of education through remote learning. However the same study acknowledges that, unlike Zoom and Google Classroom, WhatsApp was mostly used for more passive interactions and announcements. The debate about most Zimbabwean learners using what is mostly a social media platform for their online learning needs instead of the more formal Google Classroom, Zoom, Moodle and so on is in the simmering.

The results of the interviews are presented under the following themes: technical challenges, learning challenges, frequency of learning, curriculum coverage and areas for improvement. On the technical challenges that they faced, most learners expressed issues with network connectivity. Some of their responses were:

L6: The network was sometimes slow, sometimes services would be down hence no learning would take place and the network would be fast at night.

L9: The main problem I faced was that the network was sometimes slow so I could not attend the WhatsApp online lessons.

Network challenges are a genuine problem in Zimbabwe across all available network providers. Conducting online lessons on a slow or non-available network is less than ideal especially when using platforms that require a strong, stable and constant network connection for such applications as *Google Classroom*. In such cases, formative assessment which is already problematic with online learning becomes impossible. Investments into network upgrades and expansions should be the first avenue taken in order to support technology-driven online learning programmes.

Learning challenges

All learning has some challenges for one student or the other, at one situation or another. On specific learning challenges, the learners in this study felt that it was difficult to understand concepts taught due to inability to ask questions directly and instantly. Some of the sentiments are as follows:

- L1: Reading on my own, I did not fully understand some of the things due to lack of teacher guidance. While revising, I had no teacher to correct and help improve areas of weakness.*
- L3: There were explanation problems from the teacher as the work was just questions and no examples, also there were late replies.*

Feedback is an important part of learning as it allows the diagnosis of learning problems and prompt addressing of such issues. Online learning lacking this particular aspect of learning is therefore less than ideal. Besides network issues being largely to blame, Johnson & Coleman (2021) found that giving feedback in written form, which is common when teaching remotely, caused frustration to teachers and took more time to deliver than face to face feedback possible if the learners were in class, general and specific feedback would be shared expediently. Therefore, any interventions to remedy the aspect of giving feedback should take this into account, faster internet connections can make instant verbal feedback possible even with online learning.

Frequency of learning engagement

On the frequency of learning engagement, online learning and blended seemed to disrupt routine and organisation of learning and teaching to a great extent. Some of the selected responses were as follows:

- L3: I did not have a fixed timetable for my learning programme, lessons were random and not on a daily basis. Also there are too many distractions on the internet which makes it hard to focus on school work.*
- L4: It was easy to skip lessons as there was no parental or teacher guidance. Sometimes the teacher himself did not attend lessons but just gave us assignments that were confusing.*

This problem was most likely as a result of lack of checks and balances at both ends i.e. the teacher and learner ends. It is therefore of paramount importance to put in place systems that ensure that teachers deliver on their mandate just like is the norm during formal face-to-face schooling. School administrators should therefore strictly observe remote learning sessions, the advantage of digital platforms being that they maintain a record hence finding out if actual teaching took place should not be a problem even after the lesson has taken place. On the other end, parents should be furnished with their children's learning schedules and then ensure that the children attend every timetabled session and perform assigned tasks.

Curriculum coverage

Curriculum and syllabus coverage showed that the lockdown period severely reduced the variety of subjects that learners took. Most ended up taking only those subjects perceived as difficult especially the sciences and languages. The following are some of the responses:

- L5: I did not learn all the subjects thus on some subjects I benefited but in those I did not learn I became academically backward.*
- L9: ... during the lockdown I only learnt four subjects; English, maths, chemistry and geography because I could not pay for all of the subjects plus those ones usually give me the most problems in trying to understand.*

Clearly then, in situations such as the lockdown period, certain subjects will suffer more than others depending on individual learners. This should be corrected as the focus should always be on producing wholesome learners good enough in different disciplines even if they excel in one. Gadzirayi, et al. (2016) says that STEM, humanities, arts, and other fields complement the development of a balanced learner. Therefore, this means that the promotion of one discipline should guard against the stunting of other disciplines.

Learning improvement

Cumulative teaching and learning improvement are the hallmark of good academic practice. Most learners in this study showed a desire to use more formal digital platforms for learning in future with a lot of them suggesting the use of Google Classroom, which is probably the only platform they knew about. This is a selection of their responses:

L2: I suggest that learning takes place using Google Classroom or Zoom applications for learning because people post too many things on WhatsApp and I would be thinking it is schoolwork before opening.

L4: The use of Google Classroom would be effective as all students would be present in learning and therefore won't be left out.

These sentiments seemed to stem from the fact that WhatsApp was too informal a medium for effective teaching and learning. The platform itself was not designed for that purpose with assessments not possible to administer. Platforms such as Google Classroom, however, are built specifically for teaching and learning, and with them it is possible to administer tests and exercises. At the same time they allow third party applications which can put timers on tests to run on the platform hence the teacher is assured that the learner never exceeds the allotted time period when responding to test questions. As such it would be prudent for policy makers to ensure that the bulk of teaching and learning takes place on more formal platforms to ensure quality control.

4. DISCUSSION

This paper has surveyed the well-researched discourse of online and blended learning pedagogy in the context of disruptive environments such as pandemics. It is pertinent that the pedagogy be interrogated since it is a developing concept on the integration of technologies and innovation into the practice of teaching and student learning. It is also a consideration of the well-documented digital divide. The countries of the world are at various stages of adopting the pedagogy due to disparities in their economic empowerment, and within countries, the digital divide is unavoidable.

The study has touched on selected issues of concern in promoting the adoption of the pedagogy, namely: technical challenges, learning challenges, frequency of learning, curriculum and content coverage, and improvement of learning. These are central issues of interest among parents, teachers, learners, and society in general. The interpretivist research approach employed in this small study has unearthed some deep beliefs and views of the learner participants, who are directly affected by the change of pedagogy employed on them when the pandemic situation settled in. Secondary school students are mature enough to express their feelings with clarity from hindsight, and it is on that basis that the study capitalises on the shared meanings and freely expressed consciousness about their learning experiences. It is for them, an opportunity for critical self-reflection as they negotiate their learning journey (Phuthi & Mpofu, 2021). We are able, from the participant's contributing views, to discern a concern for collective and more resolute action to expedite readiness for blended learning in Zimbabwean secondary schools.

While young adolescent learners are typically technology-savvy, energetic and curious by nature, they lack resources and the support that brings them tools to play out these qualities to the full. Greenfield (2024) notes that young people first and foremost need support in their growth and learning, rather than be narrowly and problematically hailed for being digital natives. In this study the learners were of poor background in rural and urban families, and lamented the dire effects of lacking resources in the transition from face-to-face to online learning.

The study results highlight the effect of their home setups, social conditions, and their time management on online learning. They also mention the nature of subjects they study, the challenges of practical subject matter, authentic assessment, and teacher qualities, among others. The learning challenges of online learning signify institutional support inadequacies including insufficient training and socialisation (Faza et al, 2024), overshadowing the positive realities of time effectiveness, flexibility, personal development, innovative teaching methods, and collaboration with external experts. The rural Zimbabwe situation falls way into the challenges.

In face-to-face learning, attendance registers are enforced to control absenteeism and truancy in class attendance. In online learning this is done digitally and perhaps more effectively, but the learner can get away with much. The respondents in this study lamented the challenges of power and connectivity outages on their frequency and consistency in 'class attendance'. There is always a trade-off in being able to manage time responsibly (Faza et al, 2024), to avoid struggles in the medium and long terms.

The study has revealed that student cry foul in not being able to broaden their curriculum content base and studying many subjects, for fear of poor performance. Proponents of true and well-managed online learning believe it strengthens the quality of learning, with learning becoming more meaningful and learning activities incorporating elements that are reflective, instructional and social (Sheridan and Gigliotti. 2023)

Continuous improvement is a desire for all purpose-driven practitioners and productive entities. Online learning can be viewed largely as an improvement and an advancement of traditional face-to-face or distance learning. Once adopted, there is need for improvement of online learning itself. Our respondents in this study wanted to see the continued use of Google Classroom over WhatsApp as a unique and user-friendly online learning platform. They perhaps would have chosen other platforms such as Moodle, SAKAI, Blackboard, etc. had they known about them. In the words of Li and Pei (2023), the learners have to contribute to improvement of the online learning community, improve their participation as learners, and promote the long-term development of the online learning community by avoiding to be "invisible participants" and "marginal participants" in the online learning community who lack learning enthusiasm and initiative.

5. CONCLUSION

There are more impediments to effective application of the online and blended learning pedagogy than there are simplicities, as revealed by this study. Zimbabwe generally has a long way to go in ensuring the successful implementation of online and blended learning programmes in the near or distant future. The use of online and blended learning should be increasing gradually in times of quiet and normalcy, but should be stepped up in emergencies similar to the recent COVID-19 pandemic. If, as in this study, learners from a predominantly

urban backgrounds can have issues with connectivity and data challenges, then those same challenges are amplified several fold with rural learners. This is particularly devastating in the Zimbabwean context where according to the 2022 Zimbabwe Statistics Agency (ZIMSTAT) census, 64% of the population lives in rural areas. Any attempt to roll out blended learning programmes with the prevailing status quo would therefore exacerbate the education divide between urban and rural learners as well as between learners from poor and well-off backgrounds. Massive investments into network capacity building and development are therefore warranted alongside teacher and learner capacitation programmes in the use of technology-enhanced online learning software and gadgets and this would require massive stakeholder cooperation.

6. RECOMMENDATIONS

- There is need to improve digital literacy skills and acceptance of technological change for the generality of citizens in order to make blended learning programs more effective. This is also suggested in a study by Henriques, et al. (2021) who on top of general skills improvement for everyone also advocate for creation of more professional development opportunities, especially for teachers.
- There is need to seek stakeholder buy-in, in order to upgrade and expand cell phone data network systems so they can handle more traffic while also maintaining stable internet connections to facilitate learning.
- There is need to formalise and therefore regularise online learning programmes so as to ensure that a wider section of the curriculum is covered while at the same time making sure that effective teaching and learning takes place. This will also do away with teachers and learners absconding online learning programmes. To this end, more formal education platforms such as Google Classroom and Moodle should be encouraged in order to move away from social networking sites such as WhatsApp.
- There is need to bring parents on board any virtual learning initiatives hence making them conscious about how they can ensure their children stay focussed while learning from home will go a long way in ensuring this. They should also know how these digital learning platforms work in order to guard against learners deviating into other sections of the internet.

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