

# Covid19 and online teaching: Successes and challenges. A case study of Mhanya cluster primary schools in Hurungwe-Karoi, Zimbabwe

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DOI: <https://doi.org/10.5281/zenodo.7974089>

Published Date: 26-May-2023

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**Abstract:** The novel Corona virus disease 2019 (Covid19) pandemic was unprecedented and resulted in unwarranted challenges to all aspects of life and affected different sectors around the globe. The worst affected have been the poor, particularly those in developing nations like Zimbabwe where the capability to cope is limited. Different socio-economic sectors were affected including health, tourism, manufacturing and education. This paper explores the disruptions of Covid19 on the education sector in Zimbabwe; focusing on the adopted online teaching and learning method and their effectiveness within a group of cluster primary schools.

At the onset of the pandemic in 2020, decisions were taken that grounded most socio-economic sectors to a halt and paralysed day to day activities. This created a “new normal” whereby people had to predominantly work and interact remotely. Consequently, learning became remote and schools across the world resorted to digital platforms as an intervention approach to continue with the dissemination of learning.

Whilst online learning is no longer a trend in developing countries but has since become vital especially for higher education, it is a foreign concept in most developing nations and particularly for primary schools. As such, online learning in the wake of Covid19 in the context of a rural community where the poor, marginalised, vulnerable, and people with disabilities (PWD) are part of the society should be interrogated. Where learning resources exist, the development of online learning methods permits a smooth transition to maximise learning opportunities. On the same notion, in cases where institutions have meagre resources, students are excluded from benefiting due to scarce resources that work with Information Communication Technology (ICT).

In this regard, this paper sort to find out the successes and challenges encountered by primary schools in Zimbabwe in the implementation of online teaching during the Covid19 pandemic from 2020 to 2022. A survey was conducted with the Mhanya cluster schools which are made up of four primary schools. From the schools, 12 primary school teachers and four headmasters were engaged for the study as well as twenty-four grade seven learners. The study revealed that the continuous lockdowns and closure of schools due to covid19 hit hard on the conventional mode of instruction to learning hence the introduction of online learning platforms. However, access to online learning was limited due to barriers like; lack of access to ICT tools and infrastructure by rural and marginalised children which saw this cohort of learners getting total exclusion throughout the Covid19 era.

**Keywords:** Covid19, developing nations, socio-economic sectors, online learning, digital platforms, mainstream, primary schools, Information Communication Technology (ICT), learning barriers.

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## 1. INTRODUCTION

The onset of the Corona virus 2019 (covid19) pandemic brought a new dawn to technology integration in the field of education and professional practice. Globally, the education of children was grossly affected due to a series of progressive infections that forced governments worldwide to invoke lockdown measures as a way to curb further spread of the virus.

In this regard over two-thirds of the 2020 schooling year was eroded due to continuous school closures that were imposed (Cuninotta and Vanelli, 2020). The first Covid19 case was announced on 23 January 2020 in Hong Kong (Wong et al, 2020). Through circumspect monitoring and surveillance, the Education Bureau (EDB) made a proclamation for school closure and suspension of classes (the Government of the Hong Kong Special Administrative Region, 2020). The viral pandemic swept quickly across the world and one hundred and sixty-four countries had already been affected (WHO, 2020) and Zimbabwe could not be spared from the list of twenty-five countries affected in Africa (Makurumidze, 2020). On 20 March 2020 the Zimbabwean government announced the first Covid19 case as confirmed by the National Microbiology Reference Laboratory at Sally Mugabe Central Hospital (Africa news, 2020). In a bid to avoid spontaneous infections nationwide, the government of Zimbabwe abruptly closed schools, banned public gatherings and imposed several travel restrictions (Dzobo et al, 2020).

However, the under developed continents suffered major blows from the Covid19 pandemic especially in the Southern Region where Zimbabwe is located (WHO, 2020). Zimbabwe was ranked among the worst affected nations due to lack of adequate health facilities (The Indian Express, 2020). The only intervention strategy was to impose several travel restrictions and regulation of quarantine zones to hinder movement and social interaction (CIQP Bulletin 2, 2020). Restricted movements paved way for the implementation of online learning as a mitigation measure to the continued interruption of face to face learning platforms in schools and tertiary institutions. The adoption of online learning was done to alleviate the unplanned disruptions to smooth teaching (Aboagye et al, 2021).

The inception of online learning was stimulated and adopted globally as an intervention tool due to the corona virus disease 2019 (Covid19). The travel restrictions that were invoked prevented physical contact between nations, people and social amenities. The only channel that could socialise people politically, socially, spiritually and academically were the online platforms. Almost over five million children were put to a disadvantage and lost their right to education due to total closure of learning institutions (UNICEF, 2021). The Ministry of Primary and Secondary education (MoPSE) roped in with a digital platform to learning which constituted a blended approach to curriculum dissemination. The government of Zimbabwe relaunched and adopted radio, television lessons and introduced the Learning Passport Zimbabwe (software app) alternatively as counter strategies. The MoPSE partnered with UNICEF and Microsoft and built a software app the Learning Passport Zimbabwe (UNICEF, 2021). The launching of radio broadcast lessons and television lessons programme had a major thrust in increasing access to learning among Zimbabwean School Children in the midst of recurring disruptions induced by the Covid19 (New Zimbabwe, 2021). This was a UNICEF-supported initiative at ZBC's Pockets Hill Studios in Harare. As reiterated by the Deputy Minister of Primary and Secondary Education, the government had to employ this move towards a National Development Strategy 1 (NDS1) as a remedial strategy for effective instructional provision and blended learning targeting ECD and upwards during the Covid19 era and beyond (MoPSE, 2021).

Additionally, the E-learning Passport was launched on 11 March 2021. The Learning Passport was meant to improve the education of learners against learning barriers imposed by the Covid19 pandemic (MoPSE, 2021). According to Abrishamian and Feki (2021), the Zimbabwe Learning Passport gives learners access to learning resources in both formal and non-formal education. The platform, hosts Radio lessons, curriculum content, teacher guides/sources, learning modules (audio lessons, online books, videos). This is the first digital content to belong, owned and managed by the Ministry of Primary and Secondary education (MoPSE, 2021).

Zimbabwe like the rest of the world implanted E-learning a strategy dedicated to promoting access to learning and reasonable solutions to segregation caused by Covid19 requirements. However, e-learning as a coping mechanism led to further exclusion and creation of more problems than could be solved towards marginalised, vulnerable, disadvantaged and PWDs. Online learning benefited the more fortunate of society; the elite schools and ironically relegated other victims of the Covid19 who are from the poor communities. It is out of these realities that the researcher sort to analyse the challenges of online learning during the rife pandemic directing much focus on rural, vulnerable, marginalised and communities of People with disabilities (PWD). Despite the notable benefits that e-learning brought forth when adopted as an intervention measure, e-learning turned out to be another greatest tragedy that influenced further exclusion to the already excluded in Mhanya cluster rural schools as a result of the induced Covid19 regulatory measures.

## 2. REVIEW OF RELATED LITERATURE

Online learning was urgently adopted the world over due to corona virus disease 2019 (COVID-19) pandemic. Although online learning has been regarded as a solution bearer in the context of challenges that imposed barriers to learning during the Covid19 era, it is however another massive barricade that can bring total isolation to the already excluded and disadvantaged. Experts in the area of teaching pedagogy like Al Rawashdeh et al., (2021) posit the following as disadvantages associated mainly with online learning: Online learning may create a sense of isolation and total exclusion where resources are inadequate. This also is supported by Arkorful and Abaidoo (2015) who also outlined that since it is administered through remote means it results in lack of students' interaction thus creating limited and negative outcomes. It also requires training for teachers and learners and online classes are susceptible to technical issues. Furthermore, online teaching and learning creates a digital divide due to lack of expertise in the use of ICT as well as the lack of tools and infrastructure consequently demanding huge financial commitments to stage supportive infrastructure. In support of the above Shamir-Inbal and Blau (2021) present that teachers face challenges in implementing online teaching due to insufficient training with digital tools, absence of constant contact with students to monitor their study routine, and lack of support and assistance from parents

To provide accommodations to the unanticipated instabilities imposed by the arrival of the Covid19 virus, educational institutions had to brusquely swing to e-teaching to warrant continuous learning in this pandemic era (Aboagye et al., 2021). The implementation of e-learning turned to be a colossal task especially for under-developed countries like Zimbabwe where there already has been enormous legging in ICT and the requisite infrastructure to implement online teaching and learning. In-order for one to understand the impact of the shortage of ICT infrastructure particularly in the rural areas; one has to be acquainted with the settings of rural Zimbabwe where the network coverage is very poor and unreliable. The pandemic also brought along further economic melt-down in key factor areas such as education and health fraternities.

The lack of adequate ICT infrastructure stalled a smooth shift from face to face learning methods to digitalized platforms because of lack of supportive communications that could utilize ICT tools and devices for online learning. In this regard, students encountered lots of obstacles during the Covid19 era, such as lack of access to devices for online learning (Almanthari et al., 2020; Dube, 2020). On the same aspect, Zimbabwe battles with rampant electricity power cuts and this is a major problem which also causes poor and unreliable internet connectivity. This notion goes parallel with Rotas and Cahapay, (2020) who also content that unstable internet connectivity is a major obstruction to online learning.

Understanding technological tools and how they operate is a functional prerequisite for a smooth transition from face to face or traditional learning pedagogies to modern ways of teaching and learning through digital means. Relative to this reality check, most of the teachers in rural settings were caught unaware and were adversely affected by the lack of technical know-how of devices (Owusu-Fordjour et al., 2020). Online learning is a modern concept that is normally taken as a channel for learning in tertiary institutions and the elite schools that are well resourced and equipped with technological tools. However, online learning was a foreign concept to institutions that are ill-equipped, particularly in the face of Covid19 outbreak.

From the above notion, most schools could not administer digital learning platforms. This lack of technology integration by most disadvantaged schools and communities resulted in the schools' lack of experience and expertise in offering online education (Wodon, 2020). Financial positions of families also determine their ability to commit to expending towards the learning of their children (Griffiths, 2020). On this context, some learning platforms such as Ruzivo were developed as a low cost-high quality education model which is accessed across Zimbabwe at a \$2 per student for the whole month as reiterated by the Econet CEO (Oloo, 2016). However, the Covid19 dilemma resulted in some bread winners losing their jobs thereby resulting in the inability to purchase broadband data for online learning, cell phones and laptops as well as the incapacitation to fend for their family needs. As a result of job losses, there was inexplicable financial unpreparedness and instability to many families (Agormedah et al., 2020).

Lack of parental support was also another barrier that hit hard on the implementation of e-learning (Owusu-Fordjour et al., 2020). In similar studies conducted in China concerning online learning, parents expressed their worries about children's increased screen time, more exposure to harmful content over the Internet, reduced physical activities and lack of socializing (Harjule et al., 2021). The concerns that were raised ended in parents losing much zeal in supporting their children for online learning. In addition, teachers met challenges in executing e-learning due to inadequate training with digital tools, absence of constant contact with students to monitor their study routine as well as lack of support and assistance from parents (Shamir-Inbal and Blau, 2021).

### 3. RESEARCH METHODOLOGY

The study adopted a qualitative approach. Morgan (2014) posits that qualitative data is most applicable for human learning experiences as it permits pragmatic outcomes to be achieved. The survey focused on the learning experiences encountered by primary school learners and their teachers during the covid-19 era and the efficacy of online learning. Semi-structured interviews were conducted using a semi-structured interview guide to gather learners and teachers' experiences and views relative to online teaching and learning. Thematic analysis was employed.

### 4. DISCUSSION OF FINDINGS

#### Access to online learning, radio and television lessons and the e-learning passport Zimbabwe

##### School headmasters

All the headmasters confirmed that indeed the schools in Hurungwe district in particular the cluster under investigation had no access to radio and television lessons as well as the e-learning passport Zimbabwe. One of the school heads had the following sentiments;

*Our schools are poorly resourced for radio and television lessons that the Ministry of Education streamed on air through the Zimbabwe Broadcast Corporation (ZBC). All our schools received a radio for use from UNICEF but the scheduled time contradicted with what was on the ground. Schools were closed because of lockdown regulations and children could not attend classes. We also have network challenges due to electricity power cuts so this online learning concept never worked for us at all. We don't have ICT tools for use and our teachers are not trained for online learning. We still have a lot to improve but as long as we have financial challenges as at present, it online learning will never happen in rural schools.*

(Headmaster 2).

##### School children

Learners indicated that they had completely no access to online learning, radio lessons and television lesson broadcasts. Most of them reiterated that they only remember their schools receiving a radio from their District Education Offices but had never had the opportunity to make use of it since the start of the pandemic. Again due to covid-19 restrictions, they could not attend school hence would not be able to have an opportunity for radio lessons. Even in their homes, they did not have time because most of them had to help their parents in the fields and other chores. They also expressed that although they have radios, they are usually used for music and entertainment by the whole family unity so they wouldn't inconvenience everyone. On the issue of television lesson broadcast, it was very difficult to access them because they don't have television reception at all from the Zimbabwe broadcasting television (ZBC). Only two learners confirmed having television gadgets but they were for entertainment as they are used to watch movies from DVD players by the families. One female learner said the following:

*I only heard people talking about online learning and radio lessons but have never had access to them. Our school got one radio that they said will be used for radio lessons but we have never used it. We could not come to school during the lockdown because we were supposed to observe lockdown rules and stay at home. We have a radio at home but we use it for entertainment and I did not have time for learning since the lessons were scheduled after school and also doing other jobs expected of me at home. There are a lot of things I am supposed to do at home so sitting down and listen to the radio lessons will be difficult. I don't know anything about e-learning passport Zimbabwe*

(Student N).

##### Availability of infrastructure, accessories and gadgets

The availability of internet infrastructure and ICT tools was a universal challenge to schools, teachers and students. The economic hardships were cited as a major contributor to this situation. The school authorities reiterated that ICT infrastructure and gadgets such as smartphones, laptops, internet access, poor network reception and unaffordable data hampered the implementation of online learning. To fully depend on e-learning during Covid19 was a mission impossible for marginalised communities where access to technology is strained by economic challenges and financial positions of families. For example, one student explained:

*The fact that we don't have smart phones and good network, we can't even think of online learning at all. Our network is so bad such that we even go for days without WhatsApp connection. It is also very expensive to buy data, computers and smart phones when our parents are struggling to pay school fees.*

(Female student T)

One male teacher from one of the cluster schools explained:

*It's such a wish to have thought of online learning especially when myself I don't even understand what is involved when conducting online learning. Our school is even struggling to register grade seven learners for ZIMSEC registration because we don't have a laptop, this online issues is something else not even worthy of our consideration. We also see our fellow teachers in grade seven struggling to complete registration procedures, saving and exporting information on CDs as expected. This online subject requires much more training to the teachers and students as well. Every month the headmaster has to use his own money for school submissions because the school has no money; I can only say at the moment our school has no capacity to attempt anything to do with online learning. (Mr N)*

### **Successes of online teaching and learning**

Information gathered from the cluster institutions reported that the schools only have on record receipt of a single radio from UNICEF. One of the headmasters had the following to comment:

*The only gadget in possession is a radio that the school received from UNICEF for radio lessons. The school does not even have a smart phone to use for use when conducting school business. We never had any online lessons at all during the Covid-19 era.*

(Headmaster 2).

### **Challenges of online teaching and learning**

Teachers confirmed that there were major challenges associated with e-learning hence no online lessons were conducted using the radio because all learners were out of school due to the covid19 protocols. Another greatest challenge was that teachers do not have adequate knowledge and training on technological applications and use. Moreover, radio lessons were timed after normal school hours hence most learners missed out because they had no radios at home and the fact that they had to tend to other chores and obligations such as working in fields with their parents harvesting and curing tobacco, heading cattle and cooking in the case of most girls. On this notion, institutions could not make it without parents coming in to support, in other words, there was lack of parental support for online learning to be successful. One of the lady teachers explained:

*Apart from other challenges such as failure by schools to undertake e-learning due to lack of financial resources, parents failed to make efforts as most of the learners in this area migrated to Angwa River to venture into gold panning. No one was concerned about the lack of school attendance and parents who are gold panners capitalised on school closure and boosted manpower for gold panning. Others who specialise in tobacco farming used this also as an opportunity for their children to help with tobacco curing, grading and seed bed preparation. It is very challenging to work in these marginalised communities because the value for education is not recognised at all. (Mrs M)*

### **Discussion**

Based on the findings presented above, the researcher argues on a cautionary note that the implications certainly approve that online teaching and learning was and is problematic in the context of rural schools' lack of infrastructure resources. This attestation is true as the school headmasters in Mhanya cluster as well as the sixteen teachers interrogated confirmed that their institutions had no access to online learning since the closure of schools on 20 March 2020 up to 2022 onwards. On the same regard, the schools had restricted access to radio and television lessons and the Learning Passport Zimbabwe software facility. In the same vein, results revealed that Information Communication Technology infrastructure and electronic devices such as computers, laptops and tablets for online learning still continue to pose complications although some schools have had the privilege to get WIFI systems installed. The efficacy to eloquently make use of WIFI systems is hampered on a progressive note due to erratic electricity power cuts experienced in Zimbabwe especially in rural areas coupled with poor electricity pylon systems that have deteriorated in nature.

Schools from Mhanya cluster just like other major rural schools in Southern African countries encountered challenges to adopt online teaching due to the lack of proper ICT tools and gadgets such as smart phones, unreliable internet connectivity and computers. On that aspect Kayane (2019) accounts that in the rural schools of Malawi there are very poor and substandard technological infrastructure such as telecommunications and computers with low levels of technology access in learning organisations. In this regard, the difficulty emanates at the national level due to lack of technology infrastructure with little concern to improve the conditions of the situation by the government owing to financial challenges (Chawinga and Zozie, 2016). Furthermore, poor internet connectivity and high data cost in Malawi have been cited as one of the major problems just like in rural communities of Zimbabwe.

Accordingly, studies in Malawi (Chawinga, 2017 and Kainja, 2018) reveal that poor bandwidth and internet connectivity accompanied by high cost of data obstruct online learning. In the same manner, studies conducted in Botswana by Moakofhi, (2017) and in Tanzania by Kisanga and Ireson (2015) agree that the high cost of accessing internet alongside poor internet connectivity as well as serious low internet bandwidth and system breakdown are significant factors that hinder e-learning. In the same perspective, findings from Ghana testify that accessibility to online teaching and learning was also pinpointed as the major challenge faced by students during the Covid-19 pandemic in 2020 and onwards, (Aboagye, Yawson and Appiah, 2020).

More so as revealed in this research, UNICEF South Africa (2021) concur with the same sentiments that in KwaZulu-Natal remote learning due to Covid19 has been a lifeline but for the most vulnerable learners located in the backyards of the country deep in rural and marginalised communities, e-learning was out of reach. On this phenomenon, the UNICEF South Africa representative Christine Muhigana echoed that access to devices; data and services to circumnavigate online resources were simply not possible for many vulnerable children.

In the same strain, researches carried in Namibia have the same outcomes concerning challenges of online learning experienced during the outbreak of the Covid19 pandemic in Namibia from 2020 and onwards. In this respect, resources to access internet and network were a major problem as noted by Kaisara and Bwaya (2021). Students encountered numerous problems such as challenges with data costs and poor network connectivity as explained by Kibuku et al (2020). Again, Kibuku et al (ibid) postulates that the issue of costs has been identified as the major issue detouring e-learning in developing countries. On the same impression, research conducted by Duve (2020) affirms in agreement that a paradigm change to learning was very problematic due to the fact that facilities and infrastructure for online learning in schools was problematic especially in Zimbabwe.

These confirmations are good reasons to book down as indicators that in Mhanya clusterschools, online learning was problematic given the circumstances surrounding similar environments in the same contextual wave lengths. Schools were and are poor to even support teachers with data to connect on their phones and other internet gadgets.

In addition to the list of challenges encountered, teachers also complained about lack of parental support in connection with online learning assistance by parents to the learners' in Mhanya cluster schools. This is also in connection with Owusu-Fordjour et al., (2020) who also purport lack of parental support and failure by families due to insufficient financial resources to spare for e-learning. Since the Covid19 predicament caught people unaware, a lot of parents and guardians lost jobs and gotplunged in financial unpreparedness. Financial resources became thwarted causing untold suffering thus adversely affecting the education of learners in terms of financial support, (Agormedah et al., 2020).

As outlined in the findings above, students became victims of circumstance of Covid-19 challenges that adversely affected the education of children. In this context, children from rural backgrounds, vulnerable communities, the marginalised, those with disabilities and thepoor never received a satisfying and effective online education during COVID-19. These include primary school learners who are still unable to utilise technological tools needed for meaningful teaching and learning to take place.

In support of the above, Gallagher and Cottingham (2020) also indicated that these circumstances could be even bad for primary school students, since they are just beginning their self-regulation with concentration and control skills lacking as well as the ability to handle technological problems and other emergencies autonomously as compared to students in secondary and tertiary educations. In almost all issues presented, the findings of this study are identical to those pioneered in 2020, 2021 and 2022 in countries like Malawi, Botswana, Tanzania and many others without any notable discrepancies. Challenges and obstacles in the implementation of online teaching and learning as outlined above should be addressed

springing from the policy level. National policies should be centred on a continuum of provision putting all stakeholders concerned with joint responsibility especially the government, non-governmental organisations, civic rights groups, communities, the MoPSE, School Development Associations(SDAs), heads of schools, teachers to ensure that policies implemented are adhere to the goals and objectives that foster inclusivity and meaningful learning. This calls for a multi-sectoral approach to unite for the sole purpose of confronting the challenging disparities in education delivery.

In solving the dilemma under study, the academic writer is a vital instrumental tool and a leading voice for unearthing the disparities and challenges in education delivery for children who are excluded due to covid19 and other barrier threats to their access to education.

Through research and comprehensive presentation of inequalities in education delivery, the academic writer brings to the limelight all the challenges thereof with a specific and intentional focus on the unmet needs during as well as post-pandemic era for a change of policy recommendation purposes. The academicwriter addresses the tough and disrupting inequitable systems to positively include the excluded and close gaps in the key areas of educational delivery and equitable access to opportunity through inclusive online learning. Furthermore, the academic writer partners with other researchers, curriculum designers and relevant organisations in service provision to address the pressing needs through advocating for action and change on behalf of the disadvantaged, marginalised, vulnerable and PWDs.

## 5. CONCLUSIONS

The research concludes that one of the major challenges the schools faced in implementing online learning is the lack of ICT infrastructure, tools and electronic gadgets with the shortage of financial resources in rural, marginalised, disadvantaged and communities of People with Disabilities to finance online learning. In addition, evidence shows that teachers and learners in most rural schools are not well resourced and equipped with the knowledge to engage in online learning. Online learning was heavily affected by unreliable internet connectivity and this is a persistent challenge at hand since electrical power cuts are the order of the day and this causes disruption to broadband transmission. Again, online learning lacked support from the parents as a result collapsed.

## 6. RECOMMENDATIONS

The government of Zimbabwe with the engagement of all important stakeholders in the education system should focus on restructuring policy responses to ensure equitable and inclusive initiatives.

The government through responsible ministries should partner with civil society organisations for resource mobilisation in order to fund and manage crisis and pandemic situations.

The state in collaboration with humanitarian agencies must by all means try to distribute free ICT devices and learning material to vulnerable, marginalised disadvantaged and those with disabilities.

The Ministry of Primary and Secondary Education should partner with educational and free online learning providers at all times such that online learning becomes a prerequisite.

The Ministry of Higher Education should mandate Universities and Teachers' colleges to intertwine their curriculum with online teaching methodologies to empower teachers for the 21<sup>st</sup> century and beyond.

## REFERENCES

- [1] Aboagye, E., Yawson, J. A., and Appiah, K. N. (2020). COVID-19 and E-learning: the challenges of students in tertiary institutions. *Soc. Educ. Res.* 2, 1–8. doi: 10.37256/ser.212021422
- [2] Adnan, M., and Anwar, K. (2020). Online Learning amid the COVID-19 Pandemic: Students' Perspectives. *Online Submission* 2, 45–51. doi: 10.33902/JPSP.202020261309
- [3] Alamri, M., and Tyler-Wood, T. (2017). Factors affecting learners with disabilities-instructorinteraction in online learning. *J. Special Educ. Technol.* 32, 59–69. doi: 10.1177/0162643416681497
- [4] Almanthari, A., Maulina, S., and Bruce, S. (2020). Secondary school mathematics teachers' views onE-learning implementation barriers during the COVID-19 pandemic: the case of Indonesia.
- [5] *Eurasia J. Mathe. Sci. Technol. Educ.* 16:em1860. doi: 10.29333/ejmste/8240

- [6] Chawinga, W. D. (2017). Taking social media to a university classroom: Teaching and learning using twitter and blogs. *International Journal of Educational Technology in Higher Education*, 14(3), 1–19.
- [7] Chawinga, W. D., & Zozie, P. (2016). Increasing access to higher education through open and distance learning: Empirical findings from Mzuzu university, Malawi. *The International Review of Research in Open and Distance Learning*, 17(4), 1–20. <https://doi.org/10.19173/irrodl.v17i4.2409>
- [8] Cucinotta, D., and Vanelli, M (2020). WHO declares COVID-19 a pandemic, *Acta BioMed.* 91,157–160. doi: 10.23750/abm.v9i1i1.9397
- [9] COVID-19 [Zimbabwe]: Bulletin number 2-CIQP: 09 June 2020 (Bulletin on Customs, Immigration and Quarantine Procedures)
- [10] Dube, B. (2020). Rural online learning in the context of COVID 19 in South Africa: Evoking an inclusive education approach. *Multidis. J. Educ. Res.* 10, 135–157. doi: 10.447/remie.2020.5607
- [11] Dzobo, M., Chitungo, I and Dzinamarira, T. (2021). Covid -19: A perspective for lifting lockdown in Zimbabwe. *Pan Afr Med J*;35(Suppl 2). Accessed on <https://search.bvsalud.org>
- [12] Education Bureau (2021) General Information on DSS, Available online at: Retrieved from <https://www.edb.gov.hk/en/edu-system/primary-secondary/applicable-to-primary-secondary/direct-subsidy-scheme/info-sch.html> (accessed September 1, 2021)
- [13] Gallagher, H. A., and Cottingham, B. (2020). Improving the Quality of Distance and Blended Learning. Brief No. 8. Ed Research for Recovery Project 9.
- [14] Griffith, A. (2020). Parental burnout and child maltreatment during the COVID-19 pandemic. *J. Fam Violence.* 23, 1–7. doi: 10.1007/s10896-020-00172-2
- [15] Kayange, A. K. (2019). E-learning encounters in Malawi higher education institutions. *International Journal for e-Learning Security (IJeLS)*, 8(1), 592–603
- [16] Makurumidze R. (2020). Coronavirus-19 Disease (Covid-19): a case series of early suspects reported and the implications towards the response to the pandemic. *J Microbio Immuno Infections*
- [17] Moakofhi, M., Leteane, O., Phiri, T., Pholele, T., & Sebalatheng, P. (2017). Challenges of introducing indigenous culture and Natural Resources: Lecturers' perspective. *International Journal of Education and Development using Information and Communication Technology (IJEDICT)*, 13(2), 4–20.
- [18] Owusu-Fordjour, C., Koomson, C., and Hanson, D. (2020). The impact of Covid-19 on learning—the perspective of the Ghanaian student. *Eur. J. Educ. Stud.* 7, 88–101. doi: 10.5281/zenodo.3753586
- [19] Islam, N., Beer, M., and Slack, F., (2015) E-learning challenges faced by academics in education. *Journal of education and Training studies*, (3)5, pp. 102-112
- [20] Kasaira, G and Bwalya, K. J, (2021). Investigating the E-learning Challenges Faced by Students during Covid19 in Namibia. *International journal of Higher education. Vol. 10, No1; 2021*
- [21] Makurumidze R. (2020). Coronavirus-19 Disease (Covid-19): a case series of early suspects reported and the implications towards the response to the pandemic. *J Microbio Immuno Infect.*
- [22] Oloo, J (2016). Ruzivo, Econet's new digital learning platform. CIO Africa. <https://www.ruzivodigitallearning.co.zw>
- [23] Rotas, E. E., and Cahapay, M. B. (2020). Difficulties in Remote Learning: Voices of Philippine University Students in the Wake of COVID-19 Crisis. *Asian J. Distance Educ.* 15, 147–158.
- [24] Shamir-Inbal, T., and Blau, I. (2021). Facilitating Emergency Remote K-12 Teaching in Computing-Enhanced Virtual Learning Environments During COVID-19 Pandemic—Blessing or Curse? *J. Educ. Comput. Res.* 59, 1243–1271. doi: 10.1177/0735633121992781



- [25] The Government of the Hong Kong Special Administrative Region (2020). EDB Announces Class Resumption on March 2 the Earliest. Retrieved from Available online at: <https://www.info.gov.hk/gia/general/202001/31/P2020013100693.htm?fontSize=1> (accessed September 1, 2021).
- [26] The Indian Express (2020). Tracking Covid-19: Countries with the highest death rate rank poorly in Human Development Index too. New Delhi.
- [27] UNESCO(2020). *COVID19 educational disruption and response*. <https://en.unesco.org/covid19/educationresponse>. Accessed 12 Sept 2021.
- [28] UNICEF. (2019). *2018/19 education policy brief: Towards improved education for all in Malawi*. UNICEF
- [29] Wang, C., Shannon, D. M., & Ross, M. E. (2013). Students' characteristics, self-regulated learning, technology self-efficacy, and course outcomes in online learning. *Distance Education*, 34(3), 302–323.
- [30] WHO COVID-19 Strategy update -14 April 2020. <https://www.who.int>
- [31] Wodon, Q. (2020). COVID-19 Crisis, Impacts on Catholic Schools, and Potential Responses|Part 1: Developed Countries with Focus on the United States. *J. Catholic Educ.* 23, 13–50. doi: 10.15365/joce.2301022020
- [32] Wong, S. Y. S., Zhang, D., Sit, R. W. S., Yip, B. H. K., Chung, R. Y.-N., Wong, C. K. M., et al.(2020). Impact of COVID-19 on loneliness, mental health, and health service utilisation: a prospective cohort study of older adults with multi morbidity in primary care. *Br J. Gen. Practice* 70, e817–e824. doi: 10.3399/bjgp20X713021
- [33] Zheng X, Zhang D, Lau ENS, Xu Z, Zhang Z, Mo PKH, Yang X, Mak ECW and Wong SYS (2022) Primary School Students' Online Learning During Coronavirus Disease 2019: Factors Associated With Satisfaction, Perceived Effectiveness, and Preference. *Front. Psychol.* 13:784826. doi: 10.3389/fpsyg.2022.784826