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Together but Not Together: Challenges of Remote Learning for Students Amid the COVID-19 Pandemic in Rural South African Universities

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Abstract

The purpose of the study was to examine the challenges of remote learning that were faced by students in four rural institutions of higher learning amid the COVID-19 pandemic. It is well documented that in South Africa as well as globally, the COVID-19 pandemic has disrupted the teaching and learning in higher institutions of education. A call was made by the Department of Higher Education and Training that mandated universities to adopt remote learning to save the academic year. That call was a blanket statement that did not consider the context of different universities, given the inequalities that existed prior to the outbreak of COVID-19 between the historically disadvantaged universities and the well-established ones. The study adopted a qualitative approach that made use of a desktop research methodology, as well as the media (Television, radio and newspapers), and social media as sources of data gathering to document the challenges. One of the key findings was that some students studying at rural institutions of higher learning experienced challenges of limited skills as well as the convenience of and access to technology and other tools of trade. The paper concludes that such students were proposing that, 'we are together but not together". The root of such grievance is that they were grossly affected by the geographical and historical position of the universities they were enrolled at and the situation was deepened and exposed by the COVID-19 pandemic. The paper recommends the equal redistribution of resources especially to previously disadvantaged Black universities. The paper further recommends that the Department of Education introduce online learning to students from as early as high school so that there will be continuity and ease in remoting learning.

Keywords: COVID-19; challenges; education; remote learning; rural universities

Introduction and Background

The outbreak of the COVID-19 pandemic in 2020, forced many countries to shut down most of their educational, social and economic activities. The shutdown was accompanied by numerous lockdown restrictions that were put in place by most governments as a way of controlling the rapid spread of the virus. South Africa, like other countries, was not exempt from the disastrous effects of COVID-19 which impelled the government to declare a nation-wide shutdown, an endeavour that resulted in, among other effects, the closure of institutions of learning. The closure of academic institutions was done to curb the spread of the virus through social distancing (Kaisara & Bwalya, 2021; Toquero, 2020). To save the academic year, universities were compelled to rethink their teaching and learning strategies. In this respect, Kaur (2020) avers that remote learning was a reasonable option to fill the classroom void and could therefore reduce the risk of infection for students. Remote learning, therefore, not only became the latest buzzword in South Africa's academic circles but was also the only ideal measure that could help address the impact of COVID-19 on the academic year.

In this light, it is well documented that COVID-19 has resulted in a negative bearing on educational institutions, students and lecturers across the world (Mailizar et al., 2020). Hence, the adoption of measures such as remote learning. Without digressing from the discussion on remote learning, it should be noted that there are inequalities that exist between the education offered in rural and urban areas. Unfortunately, these inequalities have existed prior to the upsurge of COVID-19. In his 1998 speech, Thabo Mbeki, the then president of South Africa, described South Africa as a nation with two faces because of the inequalities that exist, namely, between the Black rural communities and the 'haves', largely populated by White communities. Thabo Mbeki observed that the Black rural community was the population most affected by a lack of economic, physical, educational, communication and other infrastructure resources (Mbeki, 1998). Two decades later, rural poverty and poor education in rural areas have continued to grow (Graetz et al., 2018; Horner et al., 2018; Letseka et al., 2018). The general consensus among the aforementioned authors is that e-learning affects society's poorest in the country where, by virtue of the country`s transition from apartheid to democracy, technology and access to the internet are mistakenly viewed to be available to everyone.

Literature, media (television, radio and newspapers) and social media posts acknowledge that the COVID-19 has deepened, exposed and widened South Africa's pre-existing inequalities between rural and urban universities (Mhlanga & Moloi, 2020; Omodan & Diko, 2021; Pasara, 2020). The inequality became more pronounced when higher education shifted to online learning, thereby exposing the prejudice suffered by those staying in rural and urban areas with regard to internet connectivity, digital access, access to resources and social support. (Mohamedbhai, 2020; Timmis, 2020). Simply put, the rural population had no equal opportunities to resources and their education was at stake. Du Plessis (2014) posits that given the unique inequality challenges faced by the rural education environment, rural university students were expected to face hiccups in the transition from the traditional way of face-to-face education to the online approach. Crawford et al. (2020) argue that it was impossible for virtual learning to seamlessly happen overnight, and that the quick transformation was linked to numerous challenges and obstacles.

Thus, the purpose of the paper was to identify the challenges confronting university students in rural communities in the achievement of their educational goal amid the COVID-19 pandemic. The current study intends to contribute to the scarce academic literature on education and the quest for Educating in the Current and Post-COVID-19 Era. Furthermore, the study intends to identify unique challenges that beset rural universities during the global COVID-19 pandemic. Noteworthy is that there are few studies that have focused on challenges of remote learning during COVID-19 (Evans-Amalu & Claravall, 2021; Montacute, 2020; Mukhtar et al., 2020). As far as can be ascertained, this study is unique to the South African rural university context. We further intended to come up with strategies that could be used to address the plight of university students in rural areas.

The current study follows this chronological order. Section 2 provides a literature review on rurality and remote learning. Section 3 provides the methodology of the study while section 4 provides the remote learning facilities in rural areas. Section 5 and 6 give the challenges of remote learning faced by rural university students and the intervention strategies. Conclusion is provided in section 7.

Objective of the Study

To establish the challenges confronting university students in rural communities in the achievement of their educational goal amid the COVID-19 pandemic.

Literature Review

For the reader to understand the contents of this paper, it is prudent to give the context and definitions of 'rural' and 'remote learning'. This section, therefore, discusses the rural and remote learning context seriatim.

Rurality

According to Langa (2015), rural refers to settings where agricultural activities are the chief means of economic gain in areas that are densely populated as per colonial and apartheid-driven land settlements. From Langa's definition, it can be drawn that 'rural' has to do with the geographical location and historical discrimination perpetuated by the apartheid government's segregationist settlement policies. Langa (2015) maintains that, because of South Africa's history, the country is still experiencing the immense effects of socio-economic challenges and inequalities which are rife, predominantly in rural areas. Langa further states that conditions such as unemployment, lack of fiscal power, physical paucity of material goods and resources, poor and dysfunctional families, chronic exposure to inadequate infrastructure, etc. are more evident in the rural school set up and negatively impact schooling provision as opposed to the urban school set up.

Emerging Voices (2015) concur with Langa and proceed to report that Africans that lived in rural areas were deprived of educational opportunities to a larger degree when compared to Africans living in urban areas. Many rural schools had insufficient resources with poor books and equipment; poor infrastructure defined by overcrowded classrooms, dilapidated buildings and mud schools; under-qualified and unqualified teachers as well as a lack of basic necessities such as decent sanitation, running potable water and electricity, (Emerging Voices, 2015). It is well-documented that rural areas are distinguished by numerous challenges that adversely

affect quality education (Ferri et al., 2020). In addition, Du Plessis (2014) refers to rural areas as underdeveloped and remote with disadvantaged and poor schools that lack basic sanitation, infrastructure, water, electricity, roads and other transport, as well as communication and information technology. Langa (2015), Emerging Voices (2015) and Du Plessis (2014) agree that the socio-economic conditions of rural areas disadvantages learners in rural schools.

Writing on South Africa's rural areas, Dube (2020) describes rural areas as remote locations that can be found in forests, mountains and the countryside. According to Dube (2020), rural people are deprived of socio-economic amenities, in particular good health services, quality education, electricity, transport and even marketing facilities. In South Africa, rural areas typically lack the economic and social viability that is needed to sustain the improvement of technology (Cristobal-Fransi et al., 2020). This presents a difficulty for the government in relation to supplying quality education services in rural areas, which in turn deteriorates the quality of teaching and learning in the country's rural areas (Du Plessis & Mestry, 2019). Relevant to this paper are the characteristics of rural areas that have been recorded by UNESCO (2005, as cited in Du Plessis, 2014). These characteristics are as follows:

- Topography, (conditions of bridges, roads to school, etc).
- Distance (remoteness) to towns.
- Access, by rural inhabitants, to information technology.
- Transport infrastructure (buses, roads, taxis).
- Access, by rural inhabitants, to facilities and services (water, electricity, sanitation).
- The economic, educational and health, status of the community.
- Access, by rural inhabitants, to lifelong learning services.
- The quality of the community's social conditions.
- Activities of civil and political society organisation.

From the above cited sources, it can be deduced that rural areas are remote places where basic services are neglected. These rural areas were created by the apartheid regime and still exist three decades into democracy. Hence, for the purpose of this paper, rural means environments that are found in the outskirts of the country where opportunities, resources, economic activities, etc. are scarce or limited as compared to the affluent communities. It is in such areas that rural education has been neglected and has become a common problem that needs urgent attention. Thus, the reason for the voices of the rural university students that “we are together but not together on online learning during the COVID-19 pandemic”.

Remote Learning

Clark and Mayer (2016) defined remote learning as teaching and learning activities delivered using digital devices with the objective of achieving outcome-based learning. Mhlanga and Moloi (2020) also defined remote learning as all the teaching and learning activities that are separated by distance and time and, thus, cannot have a contact session. The aforementioned scholars unanimously agree that remote learning involves the use of platforms such as Microsoft teams, blackboard, emails, zoom, Moodle and WhatsApp. These platforms give both the facilitator and learners an opportunity to take part in teaching and learning whilst in the comfort of their homes. The literature provides several advantages of using remote learning over contact learning. For instance, remote learning during COVID- 19 provides a safer and

enabling teaching and learning environment. Remote learning is more convenient to those with comorbidities as they have the opportunity to learn without putting their lives at risk (Ferri et al., 2020). Other advantages include: no transport and residence cost incurred, flexibility and time convenient (Bijeesh, 2017).

On the other hand, several challenges of using remote learning were identified. These include distraction problems during lectures as some of the students could not mute their mics. Brown (2017) posits that remote learning makes use of complicated tools of trade. This includes complicated software's and functions that are not user friendly to both students and facilitators. Furthermore, in remote learning there is a lack of social interaction among peers and instructors (Hutt, 2017; Kalimullina et al., 2021). Ray (2020) further posits that these challenges should be addressed for remote learning to be a success. Thus, tools of trade should be availed to both learners and facilitators. Accordingly, students should be trained on the use of these tools.

There is a plethora of literature addressing the use of remote learning in emergency set ups such as lockdown. This literature points to the widening of the existing inequalities in the education sector (Subedi & Subedi, 2020; Williams et al., 2021). For instance, Montacute (2020) observed that the COVID-19 restrictions such as the closure of schools have affected students with lower socioeconomic backgrounds. This has widened the gap between the students with and without economic difficulties due to the inadequacy of internet resources, and of basic technological skills. Moreover, Bijeesh (2017) emphasised that the closure of schools as a result of the pandemic disadvantages students that come from poor backgrounds since they do not have a proper learning environment. A study conducted in Nigeria, a developing country, highlighted that most of the university students lacked access to the internet and laptops during the pandemic, thereby affecting teaching and learning activities (Owusu-Fordjour et al., 2020).

A study conducted in Holland, found that rural students were affected by the lockdown compared to urban students (Bol, 2020). Similar findings were also extrapolated in South Africa (Mhlanga & Moloi, 2020; Omodan, 2020). The aforementioned scholars unanimously assert that remote learning was a challenge within South African universities. The authors further contend that rural students were more affected as they could not use computers, did not have sufficient skills and other facilitators could not make use of remote learning tools of trade. Contrary to South Africa, Mukhtar et al. (2020) carried out a study on the effectiveness of online learning in the Pakistan medical field during the pandemic. The results of the study show that online learning brought flexibility and fostered self-reliance. However, it disadvantaged other students as they could not do their practical's and there was a lack of feedback from all the stakeholders.

Methodology

The paper used a desktop study approach to explore the experiences and challenges that were faced by students studying at rural universities in South Africa and around the globe. This study was prompted by numerous reports and studies that were carried out across the globe and found that students studying at rural institutions of higher learning faced a myriad of challenges that disadvantaged them from acquiring quality education. The desktop method makes use of

existing data to understand the phenomenon under study (Johnston, 2014). According to Johnston (2014, p. 619), secondary data is, "analysis of data that was collected by someone else for another primary purpose". This method of data collection and analysis assists researchers with ways of collecting, analysing and interpreting data for a study (Creswell, 2014). This paper relied on published data and drew examples from other countries, though our focus was on South African rural universities amid COVID-19. The paper further made use of media and social media to explore the challenges that beset rural students during pandemic. Worth mentioning is that desktop secondary analysis was preferred since it is easy to access COVID-19 information, put the context and depth to the rural universities and COVID-19 findings. This information was available on the internet. Table 1 gives a summary of the journal articles, conference papers and reports that were used in moulding this study.

Table 1. Summary of secondary data used in the study

Source	Number of items used
Journal Articles	17
Conference papers	03
Reports	12

Results

Remote Learning Facilities Used in Rural Universities

Noteworthy is that the COVID-19 pandemic and its effects on universities were unexpected and unprecedented. Rural universities were not exempt from this challenge. Rather, they were affected immensely compared to urban universities as they had to switch from traditional delivery to remote learning.

Table 2 illustrates that universities switched to remote learning. Of note is that rural universities in the Eastern Cape, Limpopo, and Kwazulu Natal provinces used different platforms to deliver their respective outcomes. These include WhatsApp, Blackboard, Moodle, Microsoft teams, Zoom and YouTube. Surprisingly, each and every platform had its own unique use and challenges. For instance, Microsoft teams, Blackboard and Moodle were mainly used for class discussions and assessments, while zoom and WhatsApp were used for consultation purposes. YouTube was used to understand challenging concepts that students have failed to understand during classes. Remarkably, each and every tool of trade presented its own challenges, thus, the subsequent section discusses the challenges of remote learning in detail.

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Table 2. Remote learning facilities

Tool	Use	Tools of trade	Challenges
WhatsApp groups	Making announcements and sending of slides	Cell phone	Some students did not have cell phones that support WhatsApp Connectivity problems Data challenges
Microsoft teams	Conducting discussions and assessments	Cell phone Laptop Tablet	Connectivity problems during discussions and assessment Lack of skill to use Microsoft teams
Blackboard	Conducting classes and assessments	Cell phone Laptop Tablet	Connectivity problems when writing assessments Lack of skill to use Microsoft teams
Moodle	Conducting classes and assessments	Cell phone Laptop Tablet	Complicated to use Connectivity challenges when writing assessments
Zoom	Conducting classes and assessments	Cell phone Laptop Tablet	Data challenges Lak of devices that support zoom
YouTube	Revising and understanding difficult concepts	Cell phone Laptop Tablet	Lack of data to go on YouTube
Publishing sites	Downloading of free textbooks	Laptops and cell phones	Some books were not for free

Challenges of Remote Learning in South African Rural Areas

As alluded to earlier on, rural education faced challenges even before the upsurge of COVID-19. These challenges have been aggravated by the advent of COVID- 19. The first challenge identified in the previous section is adjusting from traditional teaching and learning to remote learning. The majority of rural South African universities were accustomed to contact classes and adjusting to remote learning was a daunting task. This finding corresponds with the study done by Dube (2020) in South Africa. The author posits that the new mode of learning relied heavily on online learning that made use of different learning management systems that individual universities adopted (Dube, 2020). The study established that the online mode of learning was excluding rural students from teaching and learning notwithstanding the South African government's efforts to promote online learning.

Since rural universities were adjusting to the new normal, they encountered challenges of low-tech software and an inadequacy of resources to learn the management system and connect

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to the internet. This corresponds Mutanana's (2019) findings on the effects of e-learning on students in Zimbabwe's remote areas. In his study, Mutanana (2019) found that the introduction of the myVista e-learning platform for Zimbabwe Open University, presented challenges of inadequate access to ICT and inflexible practices in their remote areas. The students had poor or no access to technical devices which limited their ability to fully communicate (Mutanana, 2019). The views by Dube (2020) and Mutanana (2019) are supported by Basilaia and Kvavadze (2020) and Zhong (2020) who opine that online learning could be effective in a country that is digitally advanced. Universities in some parts of Pakistan's online classes were also ineffective because of social marginalisation of students and the inadequacy of resources in academic institutions (Basilaia & Kvavadze, 2020).

The results in Table 2 illustrate that rural students lacked tools of trade such as cell phones, laptops and tablets. The shift to online teaching and learning was plausible but it excluded to a greater extent, students studying in rural contexts. Dube (2020), Fataar (2020) and Mutanana (2019) agree that rural students faced challenges of accessing online resources because of poor infrastructure, the unavailability of electronic gadgets, electricity, data, and a lack of skills to navigate. This move widened the gap between the rich and the poor, instead of unifying the country in the fight against COVID-19 (Dube, 2020). Adnan and Anwar (2020) emphasised that because of the challenges aforementioned, it is impossible for online learning to produce the desired results in rural areas. Thus, the inadequacy of ICT devices to connect to the internet for the purpose of online learning is a serious challenge for rural students that needs to be addressed with the urgency it deserves. Failing to address this problem will continue to proliferate the disadvantage faced by poor and discriminated students as a result of the online method of the teaching-learning process (Manzoor, 2020).

Furthermore, some lecturers and a vast number of students in rural areas are not well acquainted with online learning and are, therefore, not technologically orientated. Universities that are situated in rural areas usually attract students who come from socially disadvantaged families/backgrounds/environments. Such students face challenges of not being tech-savvy, hence useful information is not easily accessible or reachable to them (Dube, 2020). Competencies and skills are essential for online learning and teaching and this, is a challenge to most students in rural contexts. World Bank (2020) comments that students who were able to make the best use of online learning were already proficient and knowledgeable in the use of technological tools that support online learning. Langa (2015) further states that students in rural areas lacked educational support from their parents, an important finding in relation to the World Bank (2020), which observed that online learning was going to be successful to students who received support from their peers and family. As such, there were growing fears that only students from well-established universities and family backgrounds would benefit from the education offered during the COVID-19 season (Dube, 2020; Njilo, 2020). Hence the voices by the rural students that 'we are together but not together' in this education offered during the COVID-19 pandemic.

Another challenge that posed as a threat to online learning for rural students during COVID-19 was the incompetence of both lecturers and students in navigating the different online applications and learning platforms. This, according to some scholars, was as a result of the abrupt switch (which came when some lecturers and students were not ready for the abrupt

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transition) from the traditional face-to-face mode of learning to the online mode of learning (Dube, 2020; Fataar, 2020). The abrupt shift to online learning caused a lot of anxiety, uncertainty, tension and confusion to both students and lecturers for they could not get the help they wanted for the successful implementation of the online mode.

World Bank (2020) reports that online teaching and learning was going to be challenging to some students and their instructors since they had not received any training in the online instructional tools and approaches (Dube, 2020). It was also reported that when institutions of higher learning were to adopt management and e-learning or learning platforms to carry out online classes, some universities delayed or suspended implementation of online classes because of the unobtainability of the learning and management systems (Ali, 2020) and lack of skills as discussed above earlier on. This, disadvantaged students studying in rural areas because only well-resourced or established high-ranked universities were able to make a smooth transition to online classes without delays (Fataar, 2020; Adnan & Anwar, 2020).

Intervention Strategies

There should be strategies by the Department of Education to introduce online learning to learners from as early as high school so that there will be continuity and ease in remoting learning. This will allow learners from rural schools in South Africa to navigate the conversion from high school to university without encountering many hiccups. When at university students would feel confident to participate meaningfully in the construction of knowledge.

Furthermore, the Department of Higher Education and Training should also ensure that ICT infrastructure, gadgets, access to data, internet and other tools of trade are made available to rural university students. This promotes equity, provision of quality education and no student would feel left behind. This will reduce the gap that divides rural and urban students and ultimately address the inequalities that were previously and are currently prevailing.

Since it was found that some lecturers lacked software skills, rural universities should train their staff members and students to use educational software. This will ensure a smooth teaching and learning process. Further to the above, this will help realise Deputy Minister of Higher Education and Training, Buthi Manamela's goal as stated in Njilo (2020) and on social media that no student should be left behind and be treated as if they were the cause of the COVID-19 pandemic.

Worth emphasising is the rural education policy to improve the country's quality of education. This is attained by accepting and identifying the realities faced by rural students and lecturers for intervention purposes. Thus, issues such as scarce resources, lecturer's workload, lack of funds and lack of infrastructure should be addressed. The Department of Education should avoid the one-size-fits all approach. This calls for the department to give special attention to disadvantaged universities in terms of financial resources and ICT resources. This in turn improves rural universities. Furthermore, university's strive for technological advancement at their district centres, and within the students' locations. This can be achieved with the intervention from Non-Governmental Organisations.

Conclusion

The paper concludes that the COVID-19 pandemic has resulted in changes in the manner in which teaching and learning, assessments and how students to students and students to lecturers relate. This change does not favour students studying at rural institutions. Students studying at previously disadvantaged rural universities feel alienated, neglected and they feel that yes, we are together in this COVID-19 online learning that the South African Department of Higher Education called for, but we are not together. Rural university students feel looked down upon and not as equals to the students studying at affluent universities. They feel like these changes to online learning during the pandemic served as cosmetic changes where the government is paying lip service, hence, we are together but not together because they are not taken seriously. This is justified on the ground that with more than 25 years of democracy, difficulties and inequalities associated with apartheid have not changed nor addressed.

References

Adnan, M., & Anwar, K. (2020). Online learning amid the COVID-19 pandemic: Students' perspectives. *Journal of Pedagogical Sociology and Psychology, 2*(1), 45-51. https://doi.org/10.33902/JPSP.2020261309

Ali, N. U. (2020, April 2). Students disappointed with online teaching system amid COVID-19. *Daily Times*. https://dailytimes.com.pk/587446/students-disappointed-with-online-teaching-system-amid-covid-19/

Basilaia, G., & Kvavadze, D. (2020). Transition to online education in schools during a SARS-CoV-2 coronavirus (Covid-19) pandemic in Georgia. *Pedagogical Research*, *5*(4), 1-9. https://doi.org/10.29333/pr/7937

Bijeesh, N.A. (2017, April 4). Advantages and Disadvantages of Distance Learning. *India Education*. https://www.indiaeducation.net/online-education/articles/advantages-and-disadvantages-of-distance-learning.html

Bol, T. (2020, April 30). Inequality in homeschooling during the Corona crisis in the Netherlands. First results from the LISS Panel. *SocArXiv Papers*, https://doi.org/10.31235/osf.io/hf32q

Brown, C. (2017, May 16). Advantages and disadvantages of distance learning. *ezTalks*. https://www.eztalks.com/elearning/advantages-and-disadvantages-of-distance-learning.html

Bukhsh, Q. (2007). Empowerment of women through distance education in Pakistan. *Turkish Journal of Education*, 8(4). 135-151.

Clark, R. C., & Mayer, R.E. (2016). *E-Learning and the Science of Instruction* (4th ed.). Wiley. https://doi.org/10.1002/9781119239086

Crawford, J., Butler-Henderson, K., Rudolph, J., & Glowatz, M. (2020). COVID-19: 20 countries' higher education intra-period digital pedagogy responses. *Journal of Applied Teaching and Learning*, 3(1). 1-20. https://doi.org/10.37074/jalt.2020.3.1.7

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Sage.

Cristobal-Fransi, E., Montegut-Salla, Y., Ferrer-Rosell, B., & Daries, N. (2020). Rural cooperatives in the digital age: An analysis of the Internet presence and degree of maturity of agri-food cooperatives' ecommerce. *Journal of Rural Studies*, 74, 55–66. https://doi.org/10.1016/j.jrurstud.2019.11.011

Dube, B. (2020). Rural Online Learning in the Context of COVID-19 in South Africa: Evoking an Inclusive Education Approach. *Multidisciplinary Journal of Educational Research*, *10*(2), 135-157. https://doi.org/10.17583/remie.2020.5607

du Plessis, P. (2014). Problems and Complexities in Rural Schools: Challenges of Education and Social Development. *Mediterranean Journal of Social Sciences, 5(20),* 1109-1117. https://doi.org/10.5901/mjss.2014.v5n20p1109

du Plessis, P. & Mestry, R. (2019). Teachers for rural schools – a challenge for South Africa. *South African Journal of Education*, *39*(1), 1-9. https://doi.org/10.15700/saje.v39ns1a1774

Emerging Voices (2015). A Report on Education in South African Rural Communities, Nelson Mandela Foundation, HSRC Press, Cape Town, South Africa. https://allafrica.com/download/resource/main/main/idatcs/00010408:544727799aabb1b071a31c7619ed7220.pdf

Evans-Amalu, K., & Claravall, E. (2021). Inclusive Online Teaching and Digital Learning: Lessons Learned in the Time of Pandemic and Beyond. *Journal of Curriculum Studies Research*, *3*(1), i-iii. https://doi.org/10.46303/jcsr.2021.4

Farid, S., Ahmad, R., Niaz, I. A., Arif, M., Shamshirband, S., & Khattak, M. D. (2015). Identification and prioritization of critical issues for the promotion of e-learning in Pakistan. *Computers in Human Behavior*, 51, 161-171. https://doi.org/10.1016/j.chb.2015.04.037

Fataar, A. (2020). Educational transmogrification and exigent pedagogical imaginaries in pandemic times. In M.A. Peters & F. Rizvi (Eds.). *Reimagining the new pedagogical possibilities for universities post-Covid-19. Educational Philosophy and Theory* (pp.27-28). www.tandfonline.com/loi/rept20.

Ferri, F., Grifoni, P., & Guzzo, T. (2020). Online Learning and Emergency Remote Teaching: Opportunities and Challenges in Emergency Situations. *Societies*, *10*, 86. https://doi.org/10.3390/soc10040086

Graetz, N., Friedman, J., Osgood-Zimmerman, A. et al. (2018). Mapping local variation in educational attainment across Africa. *Nature,* 555, 48–53. https://doi.org/10.1038/nature2576

Horner, R., Schindler, S., Haberly, D., Aoyama, Y. (2018). Globalisation, uneven development and the North–South 'big switch. *Cambridge Journal of Regions, Economy and Society*, 11(1), 17–33. https://doi.org/10.1093/cjres/rsx026

Hutt, M. (2017, May 10). Top 10 disadvantages of distance learning. *ezTalks*. https://www.eztalks.com/elearning/top-10- disadvantages-of-distance-learning.html

Johnston, M. (2014). Secondary Data Analysis: A Method of which the Time has Come. *Qualitative and Quantitative Methods in Libraries*, 3, 619 –626.

Kaisara, G & Bwalya, K.J. (2021). Investigating the E-Learning Challenges Faced by Students during Covid-19 in Namibia. *International Journal of Higher Education, 10*(1), 308-318. https://doi.org/10.5430/ijhe.v10n1p308

Kalimullina, O., Tarman, B. & Stepanova, I. (2021). Education in the Context of Digitalization and Culture: Evolution of the Teacher's Role, Pre-pandemic Overview. *Journal of Ethnic and Cultural Studies*, *8*(1), 226-238. DOI: http://dx.doi.org/10.29333/ejecs/629

Kaur, G. (2020). Digital Life: Boon or bane in teaching sector on COVID-19. *CLIO an Annual Interdisciplinary Journal of History*, 6(6), 416-427.

Langa, P. (2015). Roundtable discussion on Rural education: Addressing the challenges held on 18 November 2015, in collaboration with the Catholic Institute of Education. https://www.cplo.org.za/roundtable-discussion-on-rural-education-addressing-the-challenges-held-on-18-november-2015-in-collaboration-with-the-catholic-institute-of-education/

Letseka, M., Letseka., M. M. and Pitsoe, V. (2018). The Challenges of E-learning in South Africa http://dx.doi.org/10.5772/intechopen.74843

Mailizar, Almanthari, A., Maulina, S., & Bruce, S. (2020). Secondary school mathematics teachers' views on e-learning implementation barriers during the Covid-19 pandemic: The case of Indonesia. *Eurasian Journal of Mathematics, Science and Technology Education*, 16(7), em1860. https://doi.org/10.29333/ejmste/8240

Manzoor, A. (2020, April 1). Online Teaching and Challenges of COVID-19 for Inclusion of Persons with Disabilities in Higher Education. *Daily Times*. https://dailytimes.com.pk/595888/online-teaching-and-challenges-of-covid-19-for-inclusion-of-pwds-in-higher-education/

Mbeki, T. M. (1998). *Africa the Time Has Come: Selected Speeches of Thabo Mbeki*. Mafube Publishers

Mhlanga, D., & Moloi, T. (2020). COVID-19 and the Digital Transformation of Education: What Are We Learning on 4IR in South Africa? *Educational Sciences, 10*(7),180. https://doi.org/10.3390/educsci10070180

Mncube, V. S., Mutongoza, B. H., & Olawale, B. E. (2021). Managing higher education institutions in the context of covid-19 stringency: experiences of stakeholders at a rural South African university. *Perspectives in Education 2021 39*(1), 390-409. https://doi.org/10.18820/2519593X/pie.v39.i1.24

Njilo, N. (2020). All students must get fair chance to finish academic year: Buti Manamela. *Sunday Times,* 03 June. https://www.timeslive.co.za/politics/2020-06-03-all-students-must-get-fair-chance-to-finish-academic-year-buti-manamela/

Letseka, M., Letseka, M. A. and Pitsoe, V. (2018). The Challenges of E-learning in South Africa. In M. Sinecen (Ed.), *Trends in E-learning*. IntechOpen. https://doi.org/10.5772/intechopen.74843

Mohamedbhai, G. (2020, April, 9). COVID-19: What Consequences for Higher Education?" *University World News*. https://www.universityworldnews.com/post.php?story=20200407064850279

Montacute, R., & Holt-White, R. (2020, May 4). COVID-19 Impacts: University Access. *The Sutton Trust*. https://www.suttontrust.com/our-research/covid-19-impacts-university-access/

Mukhtar, K., Javed, K., Arooj, M., & Sethi, A. (2020). Advantages, Limitations and Recommendations for online learning during COVID-19 pandemic era. *Pakistan journal of Medical Sciences*, *36*(COVID19-S4), S27–S31. https://doi.org/10.12669/pjms.36.COVID19-S4.2785

Mutanana, N. (2018). Open and Distance Learning in Rural Communities of Zimbabwe: Exploring Challenges Faced by Zimbabwe Open University Students in Kadoma District, Zimbabwe. *Asian of Journal Humanity, Art and Literature, 4*(2), 2312-2021.

Omodan, B. I. (2020). The Vindication of Decoloniality and the Reality of COVID-19 as an Emergency of Unknown in Rural Universities, *International Journal of Sociology of Education*, 1–26. https://doi.org/10.17583/rise.2020.5495

Omodan, B., & Diko, N. (2021). Editorial: Education and the Quest for Educating in the Current and the Post-COVID-19 Era. *Research in Social Sciences and Technology*, *6*(2), i-iii. https://doi.org/10.46303/ressat.2021.21

Owusu-Fordjour, C., Koomson, C. K., Hanson, D. (2020). The impact of Covid-19 on learning-the perspective of the Ghanaian student. *European Journal of Education Studies*, 7(3), 88-101.

Pasara, M. (2020). COVID-19: challenges and opportunities for Africa. *Africa Agenda*, 17(3).

Ray, K. (2020, June 1). What is remote learning. *Tech Learning*. https://www.techlearning.com/how-to/what-is-remote-learning

Subedi, D., & Subedi, R. (2020). Practicing Self Learning of ICT for Resilience Amidst the COVID-19 Outbreak: Experiences from Kathmandu Valley. *Research in Educational Policy and Management*, *2*(2), 78-96. https://doi.org/10.46303/repam.2020.5

Timmis, S. (2020, March 30). Alone Together? Digital Inequalities and the 2020 Student Experience of Higher Education. https://heltasa.org.za/alone-together-digital-inequalities-and-the-2020-student-experience-of-higher-education/

Toquero, C. M. (2020). Challenges and opportunities for higher education amid the COVID-19 pandemic: The Philippine context. *Pedagogical Research*, 5(4), 3-5. https://doi.org/10.29333/pr/7947

Trahar, S., Timmis, S., Lucas, L., & Naidoo, K. (2020) Rurality and access to higher education, Compare: *A Journal of Comparative and International Education,* 50(7), 929-942. https://doi.org/10.1080/03057925.2020.1810895

UNESCO. (2005). *Education for all by 2015. Will we make it? EFA Global Monitoring Report 2008*, UNESCO.

Williams, T.K., McIntosh, R.W., & Russell, W.B. (2021). Equity in distance education during COVID-19. *Research in Social Sciences and Technology*, 6(1), 1-24. https://doi.org/10.46303/ressat.2021.1

World Bank. (2020, May 28). *Remote learning and COVID-19. The use of educational technologies at scale across an education system as a result of massive school closings in response to the COVID-19 pandemic to enable distance education and online learning*. Revised draft 30 March 2012. http://documents.worldbank.org/curated/en/266811584657843186/pdf/Rapid-Response-Briefing-Note-Remote-Learning-and-COVID-19-Outbreak.pdf

Zhong, R. (2020, March 17). The coronavirus exposes education's digital divide. *The New York Times*. https://www.nytimes.com/2020/03/17/technology/china-schools-coronavirus.html