

The effect of novel coronavirus (COVID-19) outbreak on access to education

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Outcomes box

This chapter addresses the impact of Covid-19 epidemic on the Namibian education system. In Namibia the closure of schools, colleges and universities as result of policies to curb the spread of the pandemic, did not only interrupt teaching and learning but it has also coincided with a key assessment period for schools and universities, and many exams have been postponed or cancelled. The authors will look at the challenges posed to the education system in particular: is Namibia ready to roll out the fast-emerging e-learning evolution if the majority of the students are without resources, and internet connectivity? How does the country ensure that 'no one is left out'? To whose benefit is the roll out of e-learning in education? Will Namibia through e-education achieve its 2030 vision?

Recommendations for effective promotion of education amidst COVID-19 pandemic in the country are also provided.

Abstract

The outbreak of COVID-19 has brought about panic and disruptions in the functioning of different sectors worldwide. COVID-19 was established to spread from person to person in close proximity. Consequently, most governments around the world have temporarily closed educational institutions in an attempt to contain the spread of the pandemic. These nationwide closures are expected to affect the world's student population. School closure has potentially, more devastating effect in many African countries since it can derange the achievements obtained in expanded access to education and can jeopardies the future learning opportunity of the students. In Namibia the closure of schools, colleges and universities did not only interrupt teaching and learning but it has also coincided with a key assessment period for schools and universities, and many exams have been postponed or cancelled. To mitigate these negative impacts, the inevitable solution was to temporarily migrate to remote working and e-learning in schools and higher education institutions. The approach to e-learning, however needs careful consideration in its implementation due to its inherent resource intense nature which poses challenges in settings that are poorly

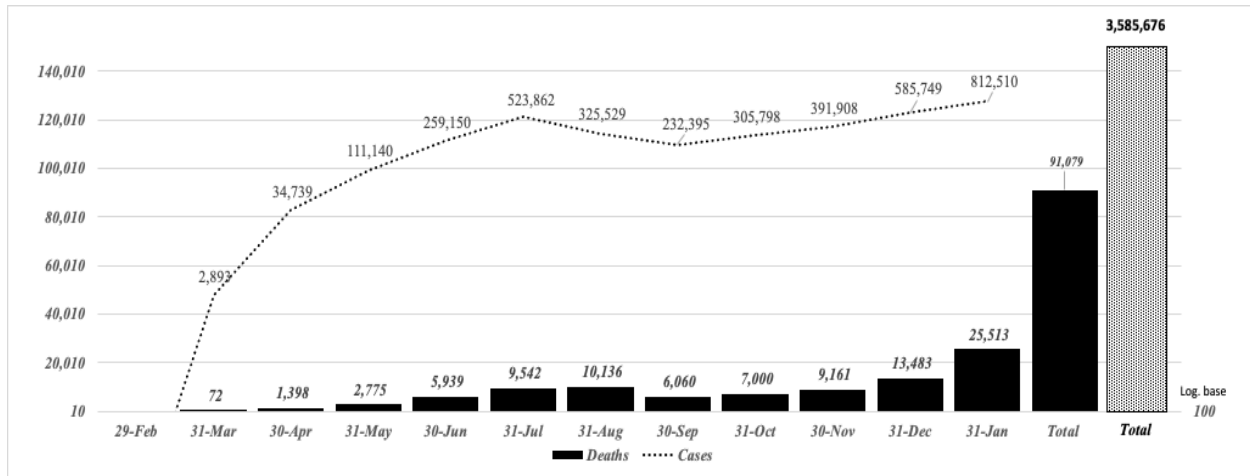
resourced. Although e-learning might be do-able to a certain extent in tertiary education, it is particularly challenging for schools given that online education is a new area for majority of both teachers and learners in Namibia. This unprecedented state of affairs is also marred by the fact that Namibia, although classified as a middle-income country, it is characterised by unequal distribution of resources, with a strong divide between urban and rural areas. With the above predicament, this chapter addresses the impact of COVID-19 epidemic on the Namibian education system.

Introduction

A cluster of cases of pneumonia of unknown cause, detected in Wuhan, China, were first reported to the World Health Organisation (WHO) Country Office in China on 31st December 2019; eventually they were later identified as novel corona virus-2019 (COVID-19). In two months, the virus spread rapidly in 114 countries in Asia, Europe, and the rest of the world and on the 11th March 2020 the WHO classified COVID-19 as a global pandemic amid the significant public health risk it posed to the world. Since then 213 countries, areas or territories, have been affected, with more than hundred and four million cases and nearly two and half a million confirmed deaths (Worldometer, 2021), at the time of writing this chapter, on the 31st of January 2021. The rapid dissemination of COVID-191 has required governments of all countries to implement strategies to mitigate impacts of pandemics, preventing and suppressing community transmission to protect the life of the citizens and address the challenges imposed on the health systems. Physical distancing, large-scale movement restrictions, lockdown of economic activities and school closure, have been the most common measures implemented at different stages, and with different degrees, in all countries worldwide. Undoubtedly the COVID-19 outbreak appears to be the most significant adverse shock the global economy is going to experience since the 2007-09 global financial crisis, (Calderon, et al. 2020). The African continent has not been immune; COVID-19 first confirmed case was on February 14th in Egypt, but despite its late arrival on the continent, the virus has been spreading rapidly across the region, reaching, with the second wave, more than 800,000 confirmed cases, (Fig. 1) and more than 91,000 deaths, (Worldometer, 2021). Worldometer data indicated that everything remaining the same, with an average daily increase of 15,000 infected cases and more than 600 deaths, the pandemic could easily surpass 4,000,000 infected cases and 100,000 deaths by the end of first year since its spread in the continent. Although

these appear to be marginal figures if compared to those coming from Europe, Asia or North America, the pandemic can still have a huge and multi-layered impact on the continent.

Figure 1. COVID-19 Confirmed cases and deaths in Africa (February 14th – 31st January 2021)



Source: Authors elaboration from Worldometer (2021).

The World Bank Vice President has indicated that African countries are likely to suffer particularly due to the COVID-19 pandemic which is going to test the limits of their economies considering that preliminary studies indicate that the region will lose between \$37 billion and \$79 billion in output for 2020 alone, (World Bank, 2020). Closing schools, while protecting children and teachers reduce the probabilities to spread the virus to the families and communities, particularly to the elderly people and other at-risk groups. International evidence shows the positive effects of school closures in reducing the propagation of infectious diseases, but the nationwide temporary closure of non-essential activities and educational institutions which followed in the majority of countries are expected to affect, directly and indirectly, the world’s student population as well. In the month of May the United Nations Educational, Scientific & Cultural Organisation (UNESCO) indicated that 161 countries were still following different form of school closures, (UNESCO 2020a), estimating that over 69.4% of the total population of students enrolled in education globally, (pre-primary, primary, secondary and tertiary) representing almost 1.2 billion children and youth were out of school because of that.

In Africa at the highest peak of the pandemic more than 300 million students have been out of school as a result of the closures with devastating effect in many countries, posing a double challenge to maintaining quality education for African students. The lack of digital readiness to scale remote learning, coupled with already fragile education systems can derange, in fact, the

achievements obtained in expanded access to education and jeopardies the future learning opportunities of the students. While some countries are better prepared to offer 'distant learning' to children during the mandatory closures, access to this alternative teaching option remains out of reach for many without means to connect, causing further loss in human capital and diminished economic opportunities. Save the Children (2020) noted, that the most marginalized girls and boys living in rural areas or on the outskirts of big cities will find it difficult to access distant education. These include children from low-income households, those with disabilities and others already affected by wars and humanitarian crises.

Namibia have closed schools as of the 16 March 2020 to mitigate the spread of coronavirus (Ministry of Education, Arts and Culture, 2020), and this is the first time the whole education system experiences a national school closure. In the past, schools' closure was caused by natural disasters like flood, mainly for basic education in the northern part of the country.

About 745,566 learners have been affected by the closure, (386,355 females and 359,211 males) with females' learners more affected than males due to their higher enrolment throughout the education sector. These learners are distributed in educational institutions as follows: 43,448 from pre-primary schools, 270,545 are from primary schools, 153,353 are from secondary and 56,046 tertiary institutions.

This chapter is going to investigate the impact that the measures put in place to prevent the spread of Covid-19 epidemic in Namibia can have on the education outcomes. The focus is on the effect on the masses, and among them the marginalized groups: poor parents, student with disabilities, girls and students from indigenous communities. Thus, there is a hazard as it may further focus attention on digital divide on marginalized poor resourced communities. Is Namibia ready to roll out the fast-emerging e-learning evolution if the majority of the students are without resources, and internet connectivity? How does the country ensure that 'no one is left out'? To whose benefit is the roll out of e-learning in education? Will Namibia through e-education achieve its 2030 vision? Those are the fundamental questions, looked at in the chapter, and it will conclude by offering possible recommendations for effective promotion of education amidst COVID-19 pandemic in the country.

Namibian education guiding principles

Previously known as the German colony of South West Africa (from 1884 to 1915), Namibia was occupied by South Africa during World War I, and administered under an apartheid regime from 1916-1989. It gained its independence in 1990, after a prolonged liberation struggle led by the

South West Africa People's Organisation, (Venditto, 2019). After independence, the newly elected government had to face a highly fragmented and dualistic society, and, as observed by Harlech-Jones, (1992, p. 1), the education system was to be '*... a tale of two worlds: one black, bleak and deprived; the other white, rich and comfortable*'. In addition, most, if not all, policies relating to education were focused on apartheid ideology and traditions; the curriculum content, and pedagogy and assessment strategies, for example, were not appropriate and did not meet the needs of all children, particularly the black people (Ipinge & Julius, 2016). The issues of disparity, inequity, and unequal educational opportunities immediately became a major concern for the government; therefore, there was a need to develop and introduce a new philosophy for education and culture' (O'Sullivan, 2004, p. 587). Education reforms were shaped and contextualized to overcome the unequal and unjust educational situations inherited by the colonial and apartheid systems.

Access to education, equity, quality and democracy are the fundamental principles underlined in the laws and regulations set up by the post-independence Namibian government to direct educational activities at all institutions, either public or private, (Ministry of Education, 2010). These goals of education were viewed as a catalyst to empower learners for the development of Namibia for the future as a knowledge-based society. The Ministry of Education and Culture (2010, p.7) characterizes a knowledge-based society as the one achievable through:

'...effective and wise use of existing knowledge and the creation of new knowledge; sharing and using knowledge effectively through a dynamic information infrastructure; using high-level technology and research to create innovations and sustainable development for people and the environment; flourishing entrepreneurship in a growing production-based economy; and equity.

The Education Act, Towards Education for All, Vision 2030, Harambe Prosperity Plan (HPP), are the working documents which have guided, during the years, the process of reforming the education sector by offering equal education to all for the realization of the set vision and educational objects towards achieving development and nation building. The above documents laid down the targets and modalities for both basic and tertiary/higher education, to nurture and cultivate the citizens with particular skills and knowledge necessary and sufficient in a modern day inclusive and multi-ethnic society.

The Constitution of the Republic of Namibia, is, however, the foundation for all national policies developed to secure equal access to education. Article 20 guarantees and describes the right to education, stating clearly that primary education is compulsory for every child; article 3 stipulates the right to use any Namibian languages as medium of instruction, and article 9 guarantees the cultural rights of people. Furthermore, in an effort to reform and transform its past fragmented education system, the then Ministry of Education and Culture, introduced four major national goals of education for all, namely, *access, equity, quality and democracy*, which have since guided the administration of education system in Namibia.

The concept of access to universal (primary) education, as indicated by Dale, (1982), is an important and necessary means to faster the development process particularly in the context of developing country. Defined by Morrow (1997) as: i) formal access whereby student/learners have physical presence in educational institutions, and ii) epistemological access, where they participate meaningfully and acquire relevant knowledge and skills, universal education remains a milestone to the country that is only 30 years of independence from an apartheid system which heavily penalised education for all.

Furthermore, Namibia being a signatory of United Nations (UN) and its agencies, such as the UNESCO, is committed to achieve the UN Sustainable development goals (SDGs). All nations have agreed to achieve the 17 SDGs by 2030, and African states under the African Union (AU) set out Agenda 2063 to coordinate a collective realization of the SDGs; in particular goal 4, to ensure: ‘... *inclusive and equitable quality education and promote lifelong learning opportunities for all.*’, (UN, 2015, p. 18).

The equity goal has to do with addressing the major hurdle in the education system, which is the equitable distribution of resources to all learning institutions in the country. Equity reflects the government’s commitment to allocate educational resources fairly throughout the country. Equity is closely associated with quality. In fact, the international pledge of Education for All (EFA) to which Namibia is a signatory, put much emphasis on equity and quality as a precondition for achieving the goal of universal primary access to quality education.

While acknowledging that quality is complex and a multifaceted concept to define, the Ministry of Education then described the goal quality as one that has to do with the provision of good education by supplying schools with well-prepared teachers and ensuring that the educators, advisory teachers and other officials strive to improve the system. In Namibia, quality education is also not explicitly defined in policy documents and other subsequent curriculum and strategy

documents of the Ministry of Education and Culture. In the, 'Toward Education for All' policy document, the explanation of quality education includes the preparation of teachers, management and measurement of the learning process, and issues related to equity, diverse learners, improvement of resources and facilities (Ministry of Education and Culture, 1993).

The goal of democracy has, instead, to do with democratic participation of parents, learners and community, as well as freedom to attend school anywhere in Namibia. Democracy in this context means that education should be democratically structured, democracy should be taught and experienced, and the aim should be to promote a democratic society (Ministry of Education and culture, 2010).

The ideals of education, specifically the national agenda towards the achievement of access by all can be manifested through the philosophy of learner-centred approach. This is a democratic method where all views are recognized and critical questions are posed without fear or intimidation. Both educators and learners/students engage as equal agent to teaching and learning process; educators serves as facilitators, whereas learners/students as participants to learning in all educational institutions. The coherent and logical framework of laws of policies, regulating education in Namibia lead to the assumption that the process (means) of education ought to be in alignment throughout the education system and institutions to achieve the desired outcome (end), bringing equitable access to quality education for all Namibians.

Being marginalised

At this point, before analysing how Namibia tries to continue with teaching and learning amid the outbreak of COVID-19, it is important to gaze into the meanings of access to education, applied particularly to the marginalised groups. Moreover, this will enable us to establish whether the national goal of access to quality education is at stake, or not with the current state of e-learning capabilities of both teachers and learners as well availability of necessary tools.

The UNESCO report on the marginalised Groups (UNESCO, 2018), argues that the right to education is universal and does not allow for any form of exclusion or discrimination, but 58% of children from marginalized groups, (mostly girls, those from poor backgrounds, boys/child-soldiers and those with disabilities) have no access to schooling, 43% will never enter any classroom, while 23% are drop-outs. In other words, 1 in 10 children are denied education worldwide and half are living in Sub-Saharan African countries.

All countries, however, face challenges guaranteeing equal opportunities for all in accessing education and within education system; this because marginalization is generally approached as a

social concept. The EFA Global Monitoring Report (UNESCO 2010, p. 135) defines marginalization as *'a form of acute and persistent disadvantage rooted in underlying social inequalities'*. Similarly, the European Journal of Educational Studies (2012) perceives a marginalized person as one who has not been given any form of recognition due to being socio-politically and economically stigmatized within the society.

Marginalization, in this sense, is thus conceived as a form of structural disadvantage which results from social inequality that has become the norm. Marginalization and exclusion occur when people are structurally and systematically excluded from meaningful participation in economic, social, political, cultural and other forms of human social activities. Milbourne (2002) argues that culturally and socially excluded groups and individuals *'become isolated and prevented from participating in society in ways that other people take for granted'* (p. 287); hence the consequence of social exclusion is the social marginalization of people from societal resources such as education and employment. The same sentiment is shared by EFA, Global Monitoring Report (UNESCO, 2010), that considers marginalization in education a acute and persistent disadvantage rooted in underlying social inequalities, which is, however, a remediable injustice.

Sharing the above concepts of marginalization, the Report of the African Commission's Working Group of Experts on Indigenous Population/Communities (2005, pp. 13, 86) uses the term marginalized to describe their assessment of the indigenous communities in Africa and to *'assist them in calling attention to the situation of the indigenous communities'*.

As indicated by Hailombe (2011), among the African countries, Namibia has the largest concentration of nomadic people, (the San, the Ovahimba, the Ovazemba and the Ovetue who are pastoralists and/or livestock herders, and hunters), residing mostly in the west (Kunene region), the east and north-east (Omaheke and Otjozondupa regions) parts of the country.

Educational marginalization, however, goes well beyond indigenous communities/ethnic groups and can be measured by the inequality between educational attainments of distinct social groups within a particular society. With its focus on educational provision and its effects, the EFA Global Monitoring Report (UNESCO, 2012) maintains that: educational marginalization denotes the status of an individual who has attained an educational level significantly lower than average to feel like being denied because of his/her educational gap in the society in general. The United Nations Children's Fund (UNICEF), defined educationally marginalised children as those who

may not have access to formal education because of many forms of deprivation and Ministry of Basic Education and Culture (2000) released in 2001 a comprehensive National Policy Options for Educationally Marginalised Children, identifying 13 educationally marginalised groups, including the different ethnic group, combining it with UNICEF, (n. d) classification, table 1 and 2 below, can give a good representation of the different groups of marginalised children and children with special needs.

Table 1. Educational marginalised children

Farmworker children	Child labourers
Children from remote areas and/or belonging to nomadic ethnic groups	Children with learning difficulties
Street children	Orphans and vulnerable children
Children in squatter camps	Girl-child
Children in resettlement and refugee camps	Learner-parent
Children with disabilities and impairments	Children with extreme severe conditions or chronic illnesses, such as HIV/AIDS
Children considered 'over-aged' in the current education policies (both inside and outside the education system)	Children who head households
Children of families living in extreme poverty	Children with emotional and behavioural challenges

Source: Authors elaboration from UNICEF (n.d.)

Table 2. Children with special needs (by type of disability)*

Both Visual and Hearing	Mild Intellectual
Partially Blind	Severe Intellectual
Totally Blind	Physical
Hard of Hearing	Learning Disorder
Deaf	Behavioural Disorder
Epileptic	Autistic

Source: Authors elaboration from Ministry of Education Art and Culture (2019)

* In 2018 there were 54,761 special needs children in basic primary and secondary education (EMIS, 2019).

The common thread that links each marginalized group indicated in table 1 is that most of them are likely to come from low-income households located in the poorer and more remote areas. These groups are prominent at the lower end of the distribution for education access and achievement and tend to be subjected to multiple layers of discrimination. Therefore, it is the obligation of the state to implement in the education the principles of inclusion, non-discrimination and equality, which are human rights but at the same time also a catalyst for poverty reduction, economic growth, and social mobility. In this case, states, especially in Sub-Saharan Africa, including

Namibia, ought to ensure that all citizens (specifically learners and students from marginalized groups) receive a good quality education as a central priority in its national development plans and implementations. Accordingly, providing a meaningful education to the most marginalized groups in society, currently still poses challenges that go beyond advancing equity in general, and it is not a simple a distributional matter of allocating equal resources per learner, since learners with greater needs require additional resources, (Hailombe, 2011). Furthermore, the Namibian Economic Policy Research Unit, (2006), stressed that education resources’ inequalities, continue between children residing in rural and urban areas, and inside them between children from different socio-economic background; the findings confirmed Iijambo, (2001) and Ipinge, (2001) judgement that access and quality of education in rural areas had deteriorated for all. Namibia's education system is expected to foster the ideals and principles of non-exclusion and non-discrimination even in the newly introduced form of education called e-learning amid COVID-19 outbreak. Clearly, any public educational institutions failure to recognise the needs for access of learners and students from the marginalized groups is tantamount to injustice.

With the above meanings of access to education for all, the questions we are asking are, how has the education system prepared to inculcate the fundamental idea of access for the learners/students from marginalized groups without leaving no one behind amid the outbreak of COVID-19? What mechanism put in place to ensure that the achieved goal of access has not been deviated?

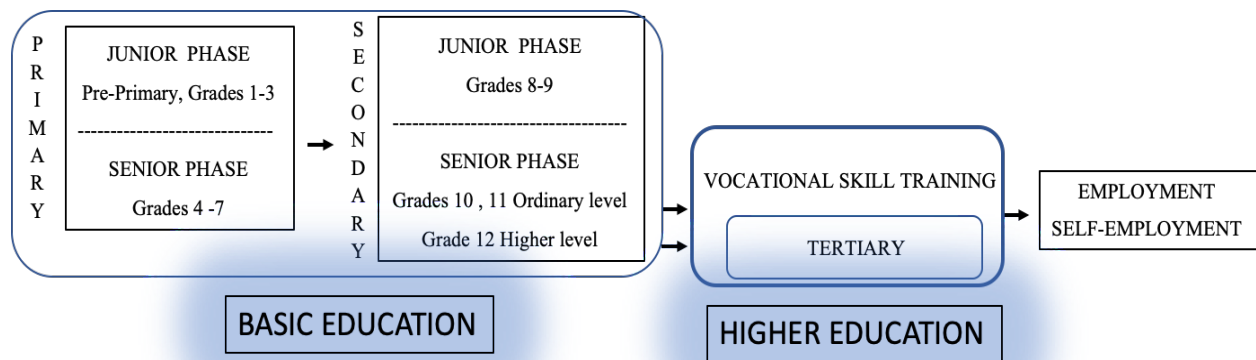
To address these central questions, the analysis of how the education system, as a whole set out preparedness plan in response to COVID-19 will follow.

Namibia’s formal education terrain

Today, Namibia’s formal education system comprises two sectors:

- i) Basic education and ii) Higher education.

Figure 3. The structure of Namibia's Basic Education



Source: Adapted from Ministry of Education, Arts and Culture (2019)

The Basic education consists of the Junior Primary Phase (Pre-primary, grades 1-3), Senior Primary Phase (grades 4-7), Junior Secondary Phase (grades 8 and 9) and Senior Secondary Phase (grades 10 and 12), the final Phase before students enter the Higher education sector as shown in figure 3 above.

According to the Ministry of Education, Arts and Culture's Education Management Information System (Ministry of Education, Art and Culture, 2019), there were a total of 1,885 schools in Namibia (10% of this being private school) in 2019. This is an increase from 1,703 in 2011.

Large numbers of schools in Namibia were founded and initially built by parents who constructed 'traditional' classrooms using materials readily/ locally available to them – normally poles, mud, thatch and/or corrugated iron.

Government at times provided 'prefabricated' buildings, often constructed from asbestos sheets, to build as many classrooms as possible within the available budget, or to speed up the building programme (Ministry of Education Art and Culture, 2018).

The divide with the urban context is however still relevant, there is a huge difference and inequality between learners in rural areas and those in urban school, in terms of physical and practical access to educational resources. According to Ministry of Education Art and Culture (2019), only 82,4% of all the schools in the country had access to electricity with Kavango West and East, Kunene, Oshana, Oshana-Namaland, Oshana-Namaland and Oshana-Namaland regions below the average; access to telecommunication is even lower, with 68 % of school having a telephone line. At the same time there are still a number of learners' schools that make use what the Ministry of Education terms as 'Outdoor Teaching Areas' - where groups of learners were taught under trees. Kunene Region is reported to be the worst off overall in making use of them; this situation is attributed to a high proportion of the population being mobile and the schools being too small to warrant the erection of permanent structures (Ministry of Education Art and Culture, 2019).

There was a total of 736, 836 learners enrolled in schools nationally in 2018, (Ministry of Education Art and Culture, 2019); two- thirds (72.5%) of all learners in the country enrolled in the Primary phase; just under one-third (27.2%) enrolled in the Secondary phase; and only 0.3% enrolled in 'other' grades. More in details the highest proportion of learners is found in the Junior Primary phase (Grades 1-3), with 37.6 %, followed by the Senior Primary phase (Grades 4-7) with 34.9 % and the Junior Secondary phase (Grade 8-9) representation of 14.4 %. Only 12.9 % of all the learners in Namibia are in the Senior Secondary phase (Grades 10-12).

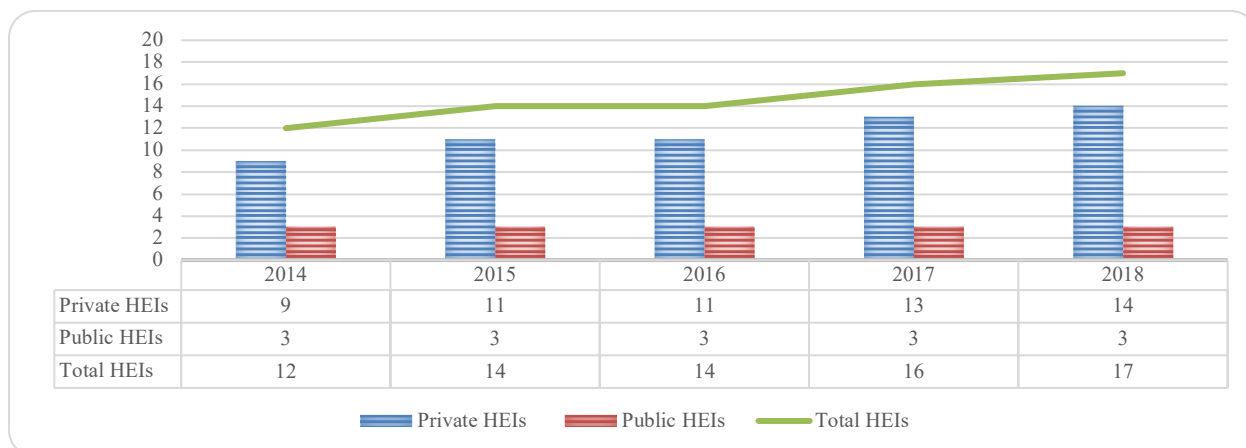
Moreover, the 2019 EMIS Report indicates that “learners from the marginalised groups made up only 1.3% of the learner population”, (Ministry of Education, Arts and Culture, 2019, p.24). This was mainly attributed to three factors: the marginalised group population is relatively small; many children from the marginalised group do not attend school, and there is lack of teachers who speak and teach in the marginalised children’s languages. This seems to have also affected the learners’ attendance from the earliest grades. According to the EMIS report, the face-to-face attendance dropout rates in the areas inhabited by marginalised learners were high (Ministry of Education, Arts and Culture, 2019). These was attributed to among other factors, the conventional teaching styles which compared the marginalised children with others from dominant groups, viewing them as a homogeneous group and paying less attention on their individual needs (Ministry of Education, Arts and Culture, 2019).

These enrolment figures demonstrate that a large number of learners in Namibian schools are children majority of whom coming from ‘rural regions’, and have limited mechanisms in place to ensure that they can keep up with their education from their homes. At the same time, the above observations emphasise the difficulties marginalised children could encounter when moving to remote teaching. To this regard, the Ministry of Education’s COVID19 interventions programmes did not explicitly identified how they would have prepare rural students for the realities of this mode of teaching.

In terms of higher education, post-independence Namibia has three main higher institutions (HEIs), three public, University of Namibia, (UNAM), Namibia University of Science and Technology (NUST) and one private, the International University of Management (IUM); all strive to ensure that education plays an important role in bringing about equal opportunities for all (Ministry of Education, 2014). The basic requirements for entrance to undergraduate degree programmes at these HEIs is a Grade 12 (NSSC), with a pass in five subjects and a total score of 25 points or more in not more than three examination sittings. Furthermore, a good performance in English language examination, at least a C grade or above, is a preliminary requirement. Given the poor performance in the NSSC/H examinations (Ministry of Basic Education, Sports and Culture, 2016), the majority of students who do not secure admission at these HEIs flock to private universities to enrol for stand-alone or preparatory programmes (Hangula et al, 2017).

Between 2004 and 2018 the number of these institution has moved from 9 to 14, (Fig 6), representing 82 % of the offer.

Figure 6. Higher Education Institutions (2014-2018*)



Source: National Council for Higher Education, - NCHE (2018).

* Even though NAMCOL is not classified as a Higher Education Institution, it is included in the NCHE statistic because of the higher education programmes it offers.

Overall, the total number of students in HEIs in 2018 was of 59,208 with a 72 % of students enrolling in the public institution and 28 % in the private ones, (Tab. 4).

Table 4. Number of Students in Higher Education Institutions (2014-2018)

	2014	2015	2016	2017	2018
Public HEIs*	33,338	34,917	39,659	39,689	42,519
Private HEIs **	13,625	14,761	14,002	16,358	16,689
Total Students	46,963	49,678	53,661	56,047	59,208

Source: National Council for Higher Education, (2018).

* Namibian College of Open Learning, Namibia University of Science and Technology, University of Namibia.

** African Leadership Institute, Headstart Montessori Teacher Training College, Institute of Bankers, Institute of Open Learning, International University of Management, International Training College LINGUA, Monitronic Success College, Namibia Evangelical Theological Seminary, Philippi Trust Namibia, St. Charles Lwanga Major Seminary, Triumphant College, Tulipohamba Training & Assessment Institute, United Lutheran Theological Seminary Paulinum, Welwitchia Health Training Centre.

Having described the status of the formal education system in the country, central to this chapter is the goal of access, hence moving to investigate the impact of that the measures put in place to contain and prevent the spread of COVID19 have on access to education for the marginalized groups in Namibia.

Conceptualizing access to education

The Ministry of Education and Culture outlined the goal *access* as having to do with the provision of education for all by expanding the school system and removing barriers that prevent children

from going to school. It means not only getting children to school, but also making knowledge and understanding accessible to them. The goal of accessing education for all has been intensified by the declaration of free universal primary education for all Namibian children from grades 0-7 in 2012. Similarly, secondary education in Namibia was also pronounced free in 2016, making the whole basic education free. All these Namibian undertakings and initiatives have been focused on accessing education for all citizens, which is in line with the goals of Education for All (EFA), the Millennium Development Goals (MDGs), and as well the Incheon Declaration on Sustainable Education for All by 2030. Expansion of access to secondary education and completion of free, equitable and quality primary and secondary education by 2030 remains one of the strategic priorities of the Ministry of Education, Arts and Culture, in line with the government's commitment to achieving Sustainable Development Goal 4 (SDG4) (Ministry of Education, Arts and Culture, 2019). Morrow (1993) provided a distinction between formal and epistemological access. The term formal access, represent physical access which emphasizes addressing the barriers that limit the ability of learners to physically locate themselves in an institution of learning. He identifies them as ranging from immovable, through learning support materials, to direct costs associated with attending school, college or university.

With the advancing technology and change in the way of doing things, the meaning of access now means more than rolling out free education and actual enrolment of learners. With the now adopted online and remote learning and teaching in the Namibian schools and higher education institutions (HEIs), access would entail physical access to a computer, internet devices and connectivity and all the online teaching and learning platforms put in place. Access in this context would also include, in Rambe and Mawere's (2011, p. 6) words, '*...human computer interface issues like log on requirements, bandwidth issues, easiness and extent of internet connectivity which can be limited in African environments characterized by the digital divide.*' Epistemological access on the other hand, relates to students' acquisition of the discursive, linguistic and textual practices of the discipline that afford them the capacity and ability to effectively function and successfully perform academically in their specific disciplines (Rambe & Mawere, 2011). Epistemological access is not the emphasis in this chapter, it formal access that this chapter is concerns with.

The challenge comes when learners from these regions are expected to embrace and learn through the newly adopted online learning. These learners have no access to electricity, they live in areas with poor network and worse internet connectivity and worse they come from poor socio-economic backgrounds. As highlighted by Czerniewicz and Ngugi (2007), the spread of Internet

connectivity in many African countries, including Namibia, is constrained by a poor communication infrastructure, inadequate and unreliable electricity and telephone networks and high telecommunication costs. Physical access to online education in Namibia schools is, further, constrained by several other factors, inter alia the following:

1. the geographic distribution of the population, many of whom live in remote, rural areas,
2. limited availability of computer technology,
3. varying degrees of electricity coverage, and low levels of technological skill.

It is thus, imperative for educational needs that would enable all the children to access to education to be integrated in the current and future response of the COVID-19 outbreak, as the future of thousands of children is at stake. There are also no explicit directions on how children with disabilities will access the learning materials and the new mode of teaching and learning. Access to information is often a barrier for learners with a disability, for example deaf and blind learners, who have specific communication needs. With the remote teaching and learning, all the teachers do is, send printed copies of notes and activities to students and expect parents to help the children learn and complete these activities. Not all the learners' parents and guardians are literate or able to help or handle their children's school work. Consequently, there is a need to for educational institutions in general and educators in particular to consider different needs based on context and marginalized communities.

Education spending trends

Education remains a top spending priority in Namibia; compared to other upper middle-income countries in the region, Namibia spends a relatively high percentage of its budget on education and in fact allocation since 2012/13 has been moving between 18 % and 20 % of total expenditure, UNICEF (2018). This trend as continued in the 2019/20 budget (CIRRUS, 2019), with education having the larger portion relative to Gross Domestic Product (GDP), in line with the UNESCO Dakar Framework for Education for All recommendation that 9 % of GDP be spent on education. However, despite all the financial support, the education system is still plagued by poor performance from students and attention should be put on an effective use of these funds in order to properly reap the benefits from this expenditure. One aspect to consider is the problem of teachers' qualification; at independence, Namibia inherited an inequitable distribution of qualified teachers; the latest available statistics (Ministry of Education, Arts and Culture, 2019) indicates that formally this gap has been reduced. Although categorising teacher qualifications is not easy because teachers obtain their training and qualifications from different education systems, The

Ministry of Education, Arts and Culture divided the teachers into two broad groups: teachers without professional teaching qualification(s); and teachers with formal and specific teacher-training qualifications, (Tab. 4).

Table 5. Qualification of teachers*

	Total	Less than Grade 12	Grade 12 or 1-2 years' tertiary	More than 2 years' tertiary
Females	20,097	326	3,233	16,538
Males	10,164	127	1,074	8,963
Total	30,261	453	4,307	25,501

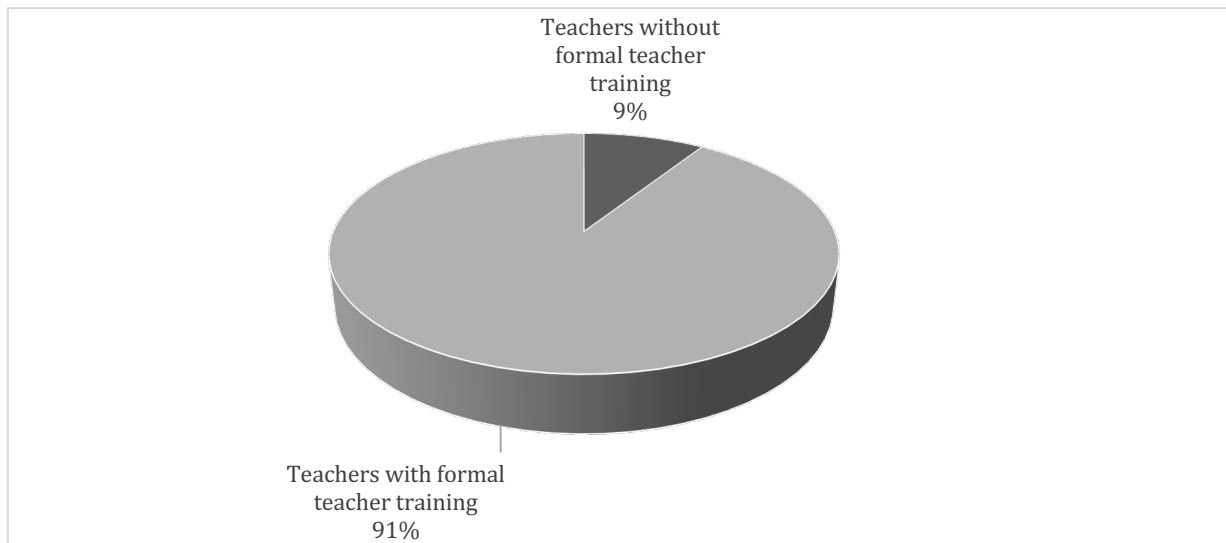
Source: Authors elaboration from Ministry of Education Art and Culture (2019)

*Total, all teachers with and without formal teaching training

Over and above teachers who have completed Grade 12 or up to an additional two years of academic training or tertiary education; and teachers who have more than two years of tertiary education after Grade 12, represent 98,5 % of the teacher population.

Breaking down teachers' qualification between those with and without formal training (Fig. 7) the data indicate that the overwhelming majority of teachers do have a formal training.

Figure 7. Percentage of teachers with and without formal teaching training



Source: Authors elaboration from Ministry of Education Art and Culture (2019)

Undoubtedly teachers are up-to-date with the use of traditional teaching tools such as textbooks, papers and pencils but as suggested by Karipi (2019), ‘...their skills in the use of technology is yet

to be determined.’, (p. 15), also because very little studies relating to teachers’ skills in the use of technology have been conducted in Namibia.

E-learning literature however, shows that without teacher understanding and facilitation in the use of such technology, learners may find difficult to fully benefit from e-learning, (Shan Fu, 2013; Ghavifekr and Rosdy, 2015), since teachers play a critical role in providing e-students with both learning skills and learning approaches that enable them to succeed, (Moore, 1997; Wedemeyer, 1981). On the other hands effective online teaching and learning require that both teachers and learners are well equipped in terms of internet connectivity and access to computers and/or smartphones, which particularly for learners, (grade 1 to 12) this is not often the case considering that only 15% of Namibian population had in 2017 a smartphone (Namibia Daily News, 2017). Furthermore, Maseke, (2016), exploring information and communication technology (ICT) innovation factors among rural youth in Namibia found that it was strongly linked with the usage of computer and computer education at school, which in most rural areas of the country was were poor. This without mentioning issues linked to poor, unstable and extremely low speed connectivity. Similarly, most of the primary and secondary school (basic education) learners in rural and urban rural area are unlikely to have access to internet, electricity or computer devices. This is a matter of national concern given that twenty years later, many Namibians bemoans the problems of a desolate school system and the lack of job opportunities and perspective for their children (Christiansen, 2011). Of course, poor families make extraordinary efforts to support their children to continue with their education in these unprecedented times. However, the fact that COVI-19-induced recession has led to loss of jobs and income in the informal sector, there is a need be to protect poor families in order to spare them from the potentially tragic dilemma of choosing between school, health care, and even food for their children

Reopening of face to face schooling

Against all the early previsions, the spread of COVID-19 cases in the African continent were lower, compared to the other continents, and by mid-May, Namibia had only recorded 25 confirmed cases of COVID-19, 16 of which had recovered.

As such, the Namibian Cabinet endorsed the Ministry of Education Arts and Culture’s suggestions for schools to resume based on the Ministry of Education, Arts and Culture’s announcement of

19th of May 2020, that the schools would reopen for face to face teaching on the 3rd of June 2020, following a phased-in approach as indicated in table 6.

Table 6. School opening phase

Phases	Opening date	Closing date	Grades
Phase 1	Wednesday, 3 rd June 2020	Friday, 18 December 2020	11 & 12
Phase 2	Monday, 22 nd June 2020	Friday, 18 December 2020	Pre-primary to Grade 3
Phase 3	Monday, 6 th July 2020	Friday, 18 December 2020	Grades 7&9
Phase 4	Monday 20 th July 2020	Friday, 18 December 2020	Grades 4,5,6,8 &10

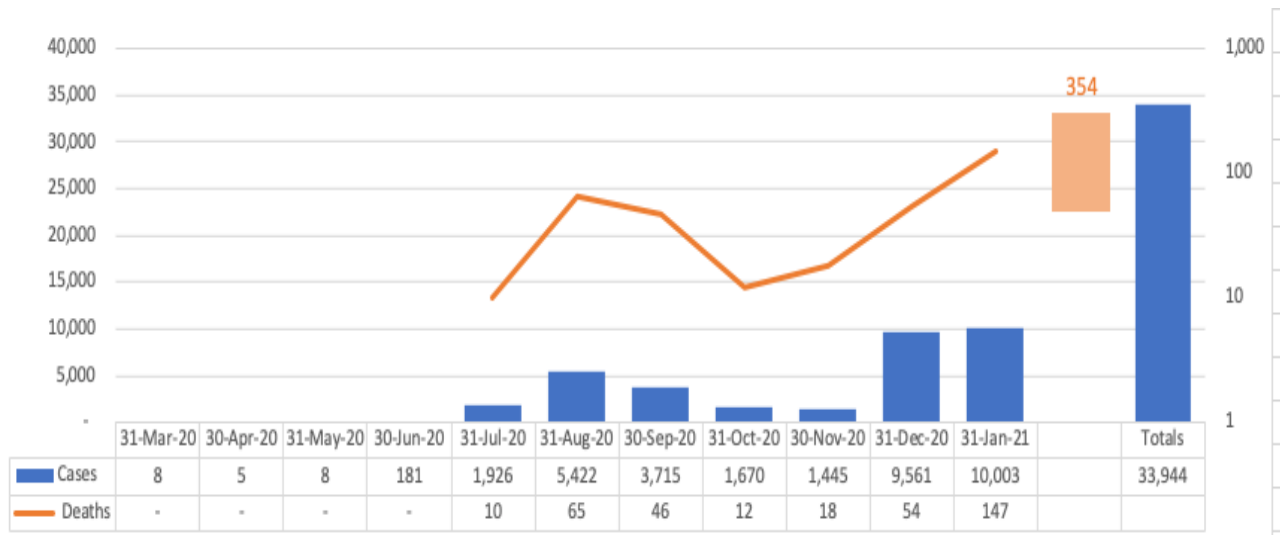
Source: Authors elaboration from the Ministry of Education, Arts and Culture, (2020)

The reopening of schools, although subject to the assumption that the COVID-19 situation would have not worsen, was a symbolic and practical signal of recovery. Given that, there was no mention of scientific or medical advice on which the decision to reopen schools for face to face was based on, the measure was combined with the continuous application of preventative measures such as, washing and sanitising of hands, wearing masks, social distancing in schools/HEIs buildings, as well as a robust programme of testing, contact, tracing and isolation of potential new cases. The aim being that to carry on with effective teaching and learning while protecting both teacher and learners from the virus.

Given the phase-in approach, all learners did not come to school at one, hence remote teaching continued with other grades, as per table 6.

Unfortunately, since May 2020 Namibia has been hit by a first and a second wave of pandemic, (between August and September 2020 the 1st wave and December 2020 - January 2021 the 2nd one), as indicated in figure 8 below. Covid-19 progression in the country has resulted in 354 deaths and 33,944 infected cases. Education institutions have been closed during the festive season and schools have only open for face to face classes at the end of January, while tertiary education has still to reopen for the 2021 academic year.

Figure 8. Covid-19 Progression (March -2020 - January 2021)



Source: Authors elaboration from Ministry of Health and Social Services daily Covid-19 reports.

Although we could not get the exact enrollment figures for the marginalised learners in the academic year 2020, we argue that access to education for these learners will be hindered by COVID-19, especially that majority of these learners are from ethnic groups which maintain an oral culture where skills, values, language and folklore are transferred orally from generation to generation and rarely written down (UNICEF, 2018). When they arrive at formal schools, they are confronted with books, which creates an immediate culture shock. These learners were just getting used to the formal face to face mode of teaching and learning, and now they had to migrate to remote learning. Remote learning required more than ever, parental involvement, and majority of these learners’ parents are practically illiterate, hence won’t be able to assist their children as far as their children’s education is concerned.

It is therefore, vital that the Ministry of Education puts support measures in place to equip teachers with the skills to provide quality remote learning. As indicated by Karipi, (2019), in light on the experience of the Namibian College of Open Learning (NAMCOL), where e-learning is actually in place, its successful implementation needs ‘the necessary attention and support’ to teachers/educators.

At the same time strategies have to be designed to properly address the needs of those students, who do not have the means to fully benefit from e-learning.

Conclusions and policy recommendations

There is little doubt that the measures implemented to curb the spread of COVID-19 enforcing social distancing, have had a negative impact on the economies of the affected countries. On the same breath, particularly in the African context, schools and HEIs closures have been the faster and reasonable solution to take. Education authorities, however, should consider that prolonged schools and higher educational institutions closures may have a disproportionately negative impact on the learners, (Azzi-Huck, & Shmis, 2020), as well as on research activities of HEIs, with the most vulnerable having fewer opportunities for learning at home. In order to prevent reversing the gains the expanded access to education have allowed to achieve in the previous years, ad hoc policies should be developed to strengthen e-learning systems both at basic and higher education levels.

At the same time there is the need to find workable solutions to make e-learning more accessible to both educators and learners, to prevent that distance learning remains out of reach for those without means to connect. This is even more urgent since until the COVID-19's vaccine is developed, the risk of new waves of the infection cannot be ruled out, even in countries like Namibia which have not been significantly hit by the pandemic. Furthermore, the 'phased approach' does not exclude the use of online lessons which could be used to in conjunction with face-to-face teaching to make sure that only limited number of students are in any school at one time.

More in particular, the following issues need to be considered:

1. Tailor-made policies

Following UNESCO (2020b) recommendation that effective responses and procedures to COVID-19 pandemic is imperative to ensure inclusion of all representatives' perspectives, the Namibian education sector ought to develop policies and procedures tailored made to accelerate access to quality education for the marginalized groups in both general and higher education institutions.

This requires that affected groups' engagements and contributions on how best their lack of access to quality education could be addressed amicably amid COVID-19 crisis.

Given the diversity of the marginalised group, i.e. students with disabilities, female students, students from indigenous communities, etc., it is evident that a top-down approach to the crafting of responsive procedures is not viable. Each group, may have different needs and require unique responsive instruments hence tailor-made procedures speaking to individual needs are crafted.

2. Support marginalised students

Marginalised students in both basic and higher education should be subject of additional classes to allow them to catch up with what they may have missed out in terms of curriculum during the period of the closure. The educational institutions should provide information in accessible formats by students with disabilities, like braille and large print. They should also provide multiple forms of communication, such as text captioning or subtitled videos, text captioning for hearing impaired, and online materials for people who use assistive technology.

3. Staff IT Capacity

E-learning can only be effective if educators are able to properly manage this innovative tool. None should expect teachers/educators to excel in providing e-learning if there are hindrances to such form of education. As revealed in the chapter, it appears there is a need to provide both basic and higher education staff with relevant IT skills. Even if schools have resumed face-to-faces classes, basic and advanced IT/e-teaching capacity building programs should be planned and provided. UNAM and NUST have the capacity and the facilities to spearhead such programs and train educators' country-wide. A baseline study can be conducted to establish effective staff e-teaching capacity that could inform the development of the kind of program to be provided per region.

4. IT Resources and Devices

Both students and educators need to have access to IT resources to enable equal participation in e-learning processes. Students/learners, should be provided with required resources, both at home and schools to be part of learning. For instance, in general education, laptops and tablets should be regarded as any books that are essential materials to teaching and learning. In other words, the country through the Ministry of Industrialisation, National Planning Commission and private sector ought to ensure that local manufacturers/companies are assembling and producing these materials locally, if the education sector has to survive economically.

Moreover, provision of internet related gadgets, specifically by those in need will assist the sector in ensuring that 'no one should feel left out' in efforts towards the realizing of access to education for all.

5. Parental education and literacy

The Ministry of Education in collaboration with the educational institutions should provide parents with (literacy) skills to handle and help manage their children's education.

In conclusion to address the aforesaid challenges and realize access to quality education agenda, fostering collaborative engagements in cross-sectoral and context-specific areas is essential. This is because, not all challenges hindering access to education for the marginalized

groups can be addressed by one sector. Aspects such as connectivity, electricity infrastructure, and the poverty level are macro aspect that directly have an impact on access to education for marginalised groups regardless of the emergency caused by the COVID 19. However, all involved should be engaged to pay their specific role towards the realization of the Education for All in Namibia.

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List of abbreviations

EFA	Education for All
GDP	Gross Domestic Product
HEIs	Higher Education Institutions
HPP	Harambe Prosperity Plan
IMS	Institute of Mediterranean Studies
INRC	Italian National Research Council
IUM	International University of Management
NUST	Namibia University of Science and
SDGs	Sustainable Development Goals
UN	United Nations

UNAM	University of Namibia
UNESCO	United Nations Educational, Scientific & Cultural Organisation
UNICEF	United Nations Children's Fund
WHO	World Health Organisation

List of words

COVID19, Education, E-learning, Namibia, Marginalisation