An enquiry into the deepen covid-19 crisis on the Nigeria education system

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Abstract
Covid-19 pandemic is and remain a major problem experienced around the world. This paper investigates the deepen Covid-19 crisis and the Nigeria Education System (NES). School closures due to coronavirus (COVID-19) are affecting learners worldwide. Therefore, the thriving concept of this paper is to ensure that the temporary measures of e-learning benefits both learners in rural and urban area and not to create inequality in the Education system in Nigeria. The paper identifies online learning, WhatsApp, SMS message, radio, television, e-mails, internet as medium of e-learning and to maintaining good inter-personal communications among others as significant factors that will help to bridge the gap between learners in rural and urban area. The roles of stakeholders is to facilitate measures that is all encompassing that will motivate teachers and others in exploring new online curricula modalities as a temporary measures to facilitate and promote e-learning among others. Thus, the challenges of e-learning facing Nigeria learners needs a collaborative effort in ameliorating their plight. This paper discusses the meaning of Education, the concept of school closure and Covid-19, Covid-19 crisis and Nigeria Education, a crisis within a crisis in Nigeria Education, enquiry into the roles of stakeholders in stem of rising learning in Nigeria Education, factors that will aid e-learning, and the general teaching and learning process in Education.

Keywords: Covid-19 pandemic, deepen, crisis, and nigeria education system

1. Introduction
Education is a process of teaching and learning whose primary purpose is to develop individuals' knowledge, skills and behaviour (Burke, Lawrence, El-Sayed, & Apple, 2009) [3]. As put by UNESCO (2006) [23], nations have a quest to provide learning environments that are economically, socially, culturally and physically accessible for all children. It is, therefore, for this quest that countries keep adapting and updating their basic education policies. People can similarly be educated through online reading of e-books, reading books, excursion, exploring their environment or even by attending classes (Peters, 2010) [20]. Furthermore, processes in education are viewed as tasks related to achievement; that is to refer to what people can consequently achieve in terms of production at individual, national and international levels (UNESCO, 2006) [23]. Thus,School closures due to coronavirus (COVID-19) are affecting learners worldwide. By the end of March 2020, over 180 countries had closed down their schools, affecting 87.4% of learners (over 1.5 billion students, see fig.1). Governments are taking action to support learners to continue their education remotely. Some are using technology, but they face a number of challenges as they also deal with countrywide healthcare emergencies and likely economic recession. We know that school closures due to health crises such as Coronavirus, Ebola outbreaks impact learners. They lead to more school dropouts, leave learners at a higher risk of abuse, loss of confidence and self-esteem, and decline in quality teaching and learning.
In Nigeria, school opportunity is correlated to income level, and public schools differ from private schools in the populations they serve. While private schools serve learners from higher socio-economic backgrounds who are willing and able to pay more to access the better resources offered by private schools, public schools which are usually free, comprise students from lower socio-economic households and low-income areas. In instances where distance learning opportunities are available, uptake will be low from the students in the public school's category, as a result of poor infrastructure such as lack of electricity, or poor/no internet connectivity, etc.
Opportunities to learn within the homes are also limited, given that a parent's ability to provide education support to their children will be shaped by their own level of educational attainment, general literacy level, and other commitments. Given the significant relationship between educational attainment and income level, and the correlation between parentals income level and school choice, we can infer that the literacy level of parents in public schools in Nigeria might be lower than their private school counterparts. In instances where the parents are educated, investing the time to train their children during this time might be a luxury. For Nigeria, the reality is simple - while the school closures are necessary to curtail the spread of the COVID19 virus, until the ban on movement is lifted and schools are reopened, majority of students will not be learning. A longer-term impact of these school closures would be deepened educational inequality. While some international development partners (UNESCO, for example) have put together and provided access to ICT-based resources to foster learning, uptake will depend largely on the level and quality of digital and internet access, and language accessibility (as most programs are available in English or other non-native Nigerian languages).
By implication, for Nigeria, the reality is simple - while the school closures are necessary to curtail the spread of the COVID19 virus, until the ban on movement is lifted and schools are reopened, majority of students will not be learning. We provide evidence from the research and examples to inform policy and programming decisions.

The Meaning of Education

Education is a continuous process that compasses teaching and learning which commences from birth till death. These processes is what Fafunwa (1987) [6]. described as the aggregate by which a child or adult develops the abilities, attitudes and other forms of behaviors which are of positive value to the society in which he lives. Education is also perceived in three dimensions. They are development of knowledge, training of mental abilities and development of character (Anyaogu, 2011) [1]. The three areas accentuated above can be attained through the rendering of assistance to students, teachers, parents school management which is what counselling entails. Education is a mirage of all activities that involves the learners, teachers and content to be learnt or taught. In most of these activities counselling is required to make teaching and learning experiences worthwhile. A section of the National Policy on Education (NPE) states that education should be geared towards: "Self-realization, better human relationship, individual and national efficiency, effective citizenship, national consciousness, national unity, social, cultural, economic, political, scientific and technical progress" (NCE, 2004). The laudable objective indicated above cannot be achieved by teachers' effort alone. The input of e-counselling through the effort of professional counsellors is required to help pupils and students alike achieve these e-learning educational goals. Therefore, electronic communication involves the use of e-mails, internet and communication aided strategies in counselling clients. In addition, counsellors are not left out in this all-important phenomenon which has potential to transform not only counselling practices but education as well. Counsellors who lack basic skills in electronic services may not be able to email and make internet contact with distant clients that need such help. This may have been necessitated by lack of access to the electronic gadgets or lack of training in their usage. It is within these premises that the importance of education can be attached to its role in guaranteeing sustainable socio-economic development in countries. Arguably, nations with educated people are likely to achieve strong social cohesion and exhibit remarkable economic growth based on productivity. On the other hand, the lack of education leaves nations stranded in illiteracy and with low or no productivity. Thus, countries have established different policy frameworks to ensure basic education for every citizen to eradicate poverty and improve production in different sectors. As put by UNESCO (2006) [23], nations have a quest to provide learning environments that are economically, socially, culturally and physically accessible for all children. It is, therefore, for this quest that countries keep adapting and updating their basic education policies.

The Concept of School Closure and Covid-19 Crisis

The past few weeks have ushered in a range of government sanctioned and structure-shifting risk-control directives across Nigeria and the Globe, in an attempt to curtail the spread of the novel coronavirus disease- COVID-19. From international airport closures, to a nationwide closure of all schools, and now, a two-week lockdown of three major states - Lagos, Abuja and Ogun, the ramifications from the slowdown/shutdown of economic activity are poised to be severe for Nigeria. It is especially critical, because in the backdrop of COVID-19, the global economic crisis and the recent slump in oil prices are further expected to intensify the impending economic crises, and create sharp shocks that will reshape the economy in the near term. For some sectors, the immediate ramifications are evident. One of such sector is the basic education sector, the impact of which has been largely felt by students. The nationwide school closures have disrupted learning and access to vital school-provided services for a record number of students in Nigeria. According to UNESCO, almost 40 million learners have been affected by the nationwide school closures in Nigeria, of which over 91 percent are primary and secondary school learners. In a short time, COVID-19 has disrupted the landscape of learning in Nigeria by limiting how students can access learning across the country. For an already fragile education system, the COVID-19 pandemic poses unprecedented challenges on the government, students, and parents, that will highlight and could amplify some of the cracks in the system. As the nation begins to grapple with these challenges, a key question arises: Is the Nigerian education system designed to adapt rapidly to the changing world? Given the state of affairs in the world today, the nation's ability to ensure continuation of learning will depend largely on their ability to swiftly harness available technology, provide adequate infrastructure, and mobilize stakeholders to prepare alternative learning programs. Generally, Nigeria's education sector is not adapting, and is expected to struggle on that front for the foreseeable future. However, the consequential socio-economic burden will be borne disproportionately by students in public schools, as compared to those in private schools. While several private schools have begun to initiate distance learning programs, and taking advantage of the myriad of ICT-learning opportunities provided by the international community, the government limited by funds and persistent deficiencies in planning, is yet to announce any official plans for providing distance learning opportunities, especially for public schools. The implication being that these students in public schools currently have no formal learning plans and could be missing learning altogether.

Covid-19 Crisis and Nigeria Education

During this time of crisis, education will not be business-as-usual, and EdTech alone cannot close the gap. Education policymakers must be realistic — with or without EdTech, usual targets of learning will not be achieved. However, there is much that can be done, both to advance learning now, and to be better prepared to return to classrooms when school closures end; allowing teachers and learners to pick up from where learning will have got to and address gaps that will have emerged. To this end, countries need to manage their expectations of what can be done over the next weeks and months, by identifying the key constraints to educating learners remotely. Large investments in EdTech will deliver few results if not based on clear assessment of the limitations of the system.

1. **Students' progression against formal curriculums will slow down:** Country-wide school closures have happened very rapidly, leaving very little or no time for schools to prepare a strategy and transition to distance learning. Syllabuses which are exam-oriented are no longer fit for purpose as tests and examinations have been put on hold. Much of the curricula cannot be

adapted quickly mentoring by teachers' educators — but teacher capability will be a core constraint, and cannot be quickly overcome.

2. **The movement to out-of-school learning will exacerbate already weak education management and data collection systems:** There is a reasonable amount of evidence in aggregate about the effects of school closures. For example, it seems that numeracy and mathematics progression is particularly affected. What we know less about is whether distance learning and EdTech can help offset these negative consequences. Most education systems around the world are to teaching online and students face the anxiety of not knowing how their school year will progress. As a result, exam orientated progress will slow down for all learners. Certain groups of learners may be particularly affected such as primary school learners who are building the foundations for later learning, vulnerable learners or those supported by adults who often have not had access to a formal education themselves.

3. **3. Many children will not have access to technology or a suitable learning environment at home:** The digital divide means that internet and mobile network access varies greatly in lowincome countries, for instance access to the internet is over 80% of the population in some Southeast Asian countries, but as low as 39% in Vietnam and some African countries. The reality is that online learning will be easier for those with access and will exclude large groups of disadvantaged learners. A large number of learners may have no electricity, some will have a radio but not a television at home, others will have basic feature mobile phones but not smartphones, and others will have only low bandwidth internet available.

4. **Teachers' ability to adapt to delivering education remotely will vary greatly:** Some teachers will champion video conference lessons, keep in touch with their students on social media or SMS messaging and produce teaching materials. Others may feel overwhelmed if they are suddenly required to use technology new to them, and if they are held accountable to new standards. Education system managers must be aware of their teachers' levels of ability and set expectations accordingly. EdTech might remedy some of this — for instance through flexibly adapting materials to different technological channels of delivery or opening up channels to rapidly support struggling teachers through instruction skills. Ultimately, it will be dedicated teachers and resilient educators who will make sure learning doesn't stop — but they can be helped by the right EdTech tools.

A Crisis Within a Crisis in Nigeria Education

▪ **Missed learning for the majority of pre-pandemic in-school-students:** According to UNESCO, about 35.9 million primary and secondary school learners are currently out-of-school as a result of the school closures. For primary schools, this number totals approximately 25.6 million students, of which about 87 percent (23.5 million) are students enrolled in public schools. The numbers are just as stark for secondary school learners. Of the roughly 10.3 million secondary school students who are out-of-school as a result of the closures, approximately 81 percent (8.4 million) of them are public school students. In Nigeria, school opportunity is correlated to income level, and public schools differ from private schools in the populations they serve. While private schools serve learners from higher socio-economic backgrounds who are willing and able to pay more to access the better resources offered by private schools, public schools which are usually free, comprise students from lower socio-economic households and low-income areas. In instances where distance learning opportunities are available, uptake will be low from the students in the public schools category, as a result of poor infrastructure such as lack of electricity, or poor/no internet connectivity, etc. Opportunities to learn within the homes are also limited, given that a parent's ability to provide education support to their children will be shaped by their own level of educational attainment, general literacy level, and other commitments. Given the significant relationship between educational attainment and income level, and the correlation between parentals income level and school choice, we can infer that the literacy level of parents in public schools in Nigeria might be lower than their private school counterparts. In instances where the parents are educated, investing the time to train their children during this time might be a luxury. For Nigeria, the reality is simple - while the school closures are necessary to curtail the spread of the COVID19 virus, until the ban on movement is lifted and schools are reopened, majority of students will not be learning.

▪ **Loss of access to vital school-provided services:** Beyond the missed learning opportunities, students in Nigeria are also losing access to the daily meals made available by the federally-funded school feeding programs. Nigeria has one of the largest school feeding programs in the world, with the World Food Programme estimating that in 2019, Nigeria's Home-grown Schools Feeding Initiative provided access to daily meals to over 9 million children in over 40,000 public schools. The benefits of school feeding programs extend beyond the immediate education benefits of the meals provided, such as encouraging enrolment in schools, and boosting learning. School feeding programs yield larger socio-economic benefits for children, their families, and society at large, two of which are especially pertinent to children of low socio-economic groups: boosting health and nutrition, and providing social protection and safety nets.

▪ **Health and Nutrition:** For some students, especially those from disadvantaged and vulnerable backgrounds, the daily meals provided at schools are their primary source of healthy and nutritious meals. With schools closed, over 9 million public school students are currently being deprived of this benefit. Beyond feeding, Nigeria's feeding program also offers health services, including deworming and immunizations for students in public schools across 17 states. This closure would unfortunately also affect access to some basic health services for poorer children.

▪ **Social Protection and Social Safety Nets -** Over 50 percent of students accessing free meals fall into first

and second wealth quintiles, representing the poorest 40 percent of the population, in a country where over 50 percent of the country live below the poverty line. As empirical evidence has revealed, people living below the poverty line usually spend between half and three-quarters of their income on food, representing a significant proportion of a poor household income. For each individual meal provided, the value can represent up to 10 percent of a family's income; for families with more than one child in school, this small figure can represent significant savings for families. The school feeding program can provide safety nets by boosting income for households. The absence of these daily meals is likely causing posing potential challenges for households, especially at this time where there has been a shut-down/slowdown in economic activities across the country.

3. Leaving more kids behind: A longer-term impact of these school closures would be deepened educational inequality. While some international development partners (UNESCO, for example) have put together and provided access to ICT-based resources to foster learning, uptake will depend largely on the level and quality of digital and internet access, and language accessibility (as most programs are available in English or other non-native Nigerian languages). According to the Digital 2020 Global Overview Report published in January 2020, about 60 percent of Nigerians are not connected to the internet. The statistics for mobile phones, which could also be used as a learning medium, are more hopeful. According to the report, around 169.2 million people - 83 percent of Nigerians have access to mobile phone connections; however, of these, 50 percent - around 84.5 million people, reside in urban areas. For the population with access, the proportion would be skewed towards high socio-economic households and urban households; an overwhelming majority of whom are private school students who already have a learning advantage over their public school peers. For children from poorer backgrounds who tend to have less access to internet connectivity, computers, and other devices, and reside in rural areas where local languages take dominance over English, ICT-learning uptake will be limited. The inequity in access to ICT-based learning has the adverse effect of further intensifying the existing disparities in learning outcomes along socio-economic lines, and the urban-rural divide. Given that the school closures are currently indefinite these students would continue to fall further behind. For students with learning disabilities, and those living in fragile and conflict-affected regions, the outlook is even more bleak. This raises a major challenge around educational inequality - given the technological landscape and income driven digital-divide, how do we harness available technology to support already marginalized students during these closures? If this is unaddressed, the gap in education quality, and inadvertently socio-economic equality could become more extreme as a result of the school closures.

Enquiry into the Role of Stakeholders to stem the rising learning crisis in Nigeria Education
Distance learning through low-cost Technology
Reaching the vulnerable population in Nigeria will require adopting multiple learning delivery modalities ranging from television, radio and SMS-based mobile platforms that are more easily available to the poor. With over percent of the adult population having access to radio and phones, it would be possible to reach most children left behind with target instructions via these mediums. How, while online platform offers personalized learning, other delivery modalities require a central planner, as coordination between all three tiers of government, and the private sector (media platform owners). This is where the role of the Ministry of Education will crucially extend beyond traditional policy making and regulations. The commissioners of education could help in the deployment and use of these tools within states, while the federal government coordinates the state efforts by plugging capacity and finance gaps. The government could draw on the experience of Sierra Leone, where the Ebola crisis led to school closures for about 9 months. To reach the most vulnerable and excluded children, the Government of Sierra Leone harnessed radios and televisions to deliver lessons. Whatever strategy the government chooses to incorporate, they must ensure that it is cost-effective (at least available within the home) and easy to use (children and their parents/guardians have some knowledge of it beforehand or can easily learn to use them).

Empowering and Assisting Parents
Parent/guardians irrespective of their education level will required to play a pivotal role to ensure learning is unnumbered. In order to ensure proper uptake of the available resources, the government will also need to ensure that parents are equipped to create a conducive learning environment, and support children in this new mode of learning. At this time, parents would be required to act as intermediaries between the school management/government and the children in learning delivery. In some instances, parents would need to take on the role of a teacher in home schooling their children, although relying on guidance from school. Additionally, most of the learning mediums would be shared amongst household members, and the responsibility will fall on the parents to determine and allocate usage among family members. Therefore, it is essential that the government support them in understanding and executing their roles during this crucial time.

Ensuring Access to Nutritious Meals and Vital Services
As part of palliatives to cushion the economic effect of the lockdown, the government announced that it intends to sustain the school feeding program to children. While this is reassuring, it is not yet known how this would be implemented. For example, will the government send daily prepared meals to households, or would the cost of the meals be monetized? By extension, there is a need to design a strategy to keep other educational support programmes flowing. The pandemic already underscores the importance of vaccinations, hence windows to vaccinate children for protection against diseases need to be open. Given that all

children are at home; house-to-house vaccination could be deployed. Other vital services, such as providing sanitary pads for girls, can also be distributed via this means. Given that these services are an integral part of learning, scaling them up during these difficult economic times might be crucial. Since the major beneficiary of school feeding programmes are the poor, and given the economic shocks facing the entire household, it might be insufficient to reach only children within the household, the government might need to seek ways to provide meals for entire household.

Reaching the most vulnerable
In keeping the flow of these education support programmes, the educational needs of the hard-to-reach families could also be met. Lessons and homework can go together with physical deliveries of additional educational support, while each family develops their home-grown strategy to cover the material. Angola, Uganda, and Zambia have already embedded this approach in their Covid-19 response strategy. The key requirement would be the conscious and active involvement of school administrators in the various.

Education Finance
The fiscal space to fund education has further shrunk with the shock on government revenue and economic downturn arising from the Covid-19 pandemic. May items in the 2020 Education Sector appropriation bill, will not be implemented due to the drastic financial shortfall. Yet, more funding is required to keep learning going or scale-up education support programmes as part of the governments palliative measures. For the government, reducing costs will re-prioritizing its plans in light of the new reality. The most urgent needs at the moment will be improving teacher's motivation, learner's preparedness and galvanizing domestic digital and media enterprise. sThe needs to be implemented with innovation sourcing of learning infrastructure during this period. For example, reaching children through existing school and home appliance and gadget will be more cost-effective. Greater involvement of domestic philanthropists and digital entrepreneurs can reduce the financial burden of sustaining learning through the crisis.

Tapping into globe resource
The World Bank, UNESCO and other development partners have already rolled out a number of education resource that development countries can readily developed. The Edtech industry in general is also providing free online platforms to engage directly with students and assist school administrators and governments to identify technological solutions that support remote learning. On a larger scale, the countries should explore international loans and grants facilities for education as parts of mitigation and recovery plans in weathering the Covid-19 crisis.

Enquiry into covid-19 and how its refocus or reshaped nigeria education within weeks and one year
EdTech can help mitigate the effects of the educational crisis, but alone it is not the solution, and it will be difficult to scale up in a short time frame. This is not the right time to invest heavily in new hardware, or entirely new curricula. Rather, we highlight what can be done within current constraints, with resources readily available, and with minimum levels of investment. We describe solutions that

can improve outcomes in the short term (within weeks after school closures), and in the longer term (within one year, either while schools are still closed still, or when countries will need to address the learning gaps that have emerged). The immediate consequences of the pandemic might be dire, bus this crisis offers a unique turning points, an opportunity to learn, reshape, and build resilience into the educational system in Nigeria. Policymaker have a unique opportunity to explore how this emerging reality could usher in a new educational architecture that tackles two of the nations most urgent pre-pandemic education crisis. Access (the country has the highest out of school children in the world) and quality (as majority of the children in school are not learning).

A simple grassroots platform where teachers can share their own edtech solutions can be a quick start
One example is DIKSHA in India, a platform that has created a community of practice over recent years, hosting lesson plans and supporting materials uploaded by teachers and curated by a central authority. The platform can help level the variable abilities of teachers to use EdTech, and can multiply the efforts of 'champion' teachers who create resources in local languages for local curricula. This can be complemented by tools that also provide direct feedback to teachers, such as the Tusome platform in Kenya which helped bridge learning gaps in resource-constrained settings where teachers struggled to reach targets. In the COVID-19 context, teachers in Nigeria should be motivated and encouraged by the government to share solutions that work on the internet, but low-tech solutions could be as simple as connecting small networks of isolated teachers by SMS.

Broadcasting lessons through radio or television may help reach isolated students without internet access
By making use of existing infrastructure and cheaper technology, initiatives can be set up quickly, at scale and with little investment. Educational television and radio provision have demonstrated benefits to learning for early days and primary school. Television lessons are already being used in Kenya in response to the current crisis, but there are wider examples for reference, from the classic Sesame Street to local programmes such as Know Zone in Kenya, and Ubongo Kids in Tanzania. Similarly, providing only content that requires high bandwidth (such as videos) will not achieve much where access is limited. Rather, content will need to run on low bandwidth, offline or be accessible on basic feature mobile phones (the primary means to access the internet in many low-income countries).

Education through technology can be 'gamified' to maintain learning over longer school closures
The risk in the longer-term is that students will lose interest especially when parents do not have capacity to motivate them. Countries and teachers directly can apply game-like elements to lessons and assignments, both online and on television and radio. This could include the addition of points, achievement badges or competitive leaderboards. There is emerging evidence that 'gamification' can be effective. The simple message is that providing worksheets and syllabus books will achieve little by itself – a key part of the role of the teacher and the school environment is about motivating students. Remote learning solutions must

try to fill this motivation gap. Meanwhile, countries should also foster a shared identity that benefits learning. For instance, highlighting that it is crucial at this time for all to work together to overcome the danger of a generation losing out on their education and future economic prospects.

To cope with the educational crisis, within the next year policymakers will need essential data

Currently, countries do not have a sense of how to reach every child (what technology is available within each household), where the gaps are (how much each child has fallen behind), what is effective (what EdTech works in their local context: local-level solutions that schools, communities, and teachers designed to support student).

In one year's time, having the right technology to 'diagnose and treat' learning gaps that have emerged during the crisis will make a substantive difference

Digitalised personalised learning software already helps bridge learning gaps in low-income countries. Mindspark improved learners' scores in maths by 38% in India over 4.5 months. These tablet-based apps assess students' current level and give personalised lessons and They may also help gender disparities in learning. One such initiative 'onecourse' prevented as gender gap in reading and mathematics from surfacing amongst first-graders in Malawi. Countries need to start thinking now about taking action to stop emerging gaps. To do this they must focus on how to acquire the right technology, adapt it to the local context and start rolling it out in phases, guided by feedback (Central Square Foundation gives guidance on these processes). The good news is that once scaled up, these technologies can become relatively inexpensive.

Another useful response is to create an online one-stop-shop of resources that students can access directly or with the support of their parents

Educational resources are already available on the internet, such as the Khan Academy. A wide range of open educational resources are freely available; distance courses for school-aged learners published under open licences such as British Columbia Open School may be rapidly repurposed. But policymakers must understand that online resources vary in quality and are rarely designed for local curricula, culture or language. Countries should invest in their own free resources for students and families and draw on partnerships with alternative or non-formal providers to help strengthen digital learning materials — both in the immediate term and for long term preparedness. As noted above, the provision of education during the crisis) and what can improve equity (to overcome persistent problems of access to education). One way to effectively gather data would be to use mobile phone-based apps where teachers can report information about the progress and needs of their students – and the app would then collate and display this data geographically. Already, UNICEF is mapping connectivity of schools worldwide - but the next step is to map the connectivity and learning needs of every student. When doing so, countries should plan to set good data standards across the system, to ensure compatibility, to match any micro services they acquire to their data systems, and to provide the right governance of data for their context, including data privacy considerations.

Conclusion

EdTech can help mitigate the effects of the educational crisis in Nigeria, but alone it is not the solution, and it will be difficult to scale up in a short time frame. The immediate consequences of the Covid-19 pandemic might be dire, but this crisis offers a unique turning points, an opportunity to learn, reshape, and build resilience into the educational system in Nigeria. Policymaker have a unique opportunity to explore how this emerging reality could usher in a new educational architecture that tackles two of the nations most urgent pre-pandemic education crisis. Access (the country has the highest out of school children in the world) and quality (as majority of the children in school are not learning). The one-way transmission of information by radio or television can potentially be supplemented by communication using mobile phones. Broadcasts have been used in combination with SMS to communicate between educators and students, as well as peer networks of students. The popularity of WhatsApp in low- and middle-income countries may lend itself to quickly form such groups. There are also EdTech apps being designed to work through basic feature phones and SMS messaging (such as text TETEA in Nigeria) – and these will have a much broader reach than smartphone and tablet apps. While television and radio lessons can have an immediate impact, countries should also learn from what works now and invest in producing television and/or radio materials to be prepared if schools remain closed the long term or for future crises.

Recommendations

The following recommendations were made:
1. Government at all levels should endeavour that the e-learning as an educational palliative serve the learners in rural and urban area, and develop individuals' knowledge, skills and behaviour in the society in other not to create inequality in the online learning process, thus, educational palliatives provided by the government should foster and meet immediate needs of the learners affected by the Covid-19 pandemic.
2. Policymaker should have a unique opportunity to explore how this emerging reality could usher in a new educational architecture that tackles two of the nations most urgent pre-pandemic education crisis. Access (the country has the highest out of school children in the world) and quality (as majority of the children in school are not learning).
3. More effort should be made by the government to train and retrain teachers in E-communication. It gives room for a wider range of teaching activities. Individuals will have opportunity to relate with teachers online as it is in developed countries.
4. Government and NGO's should establish more e-learning centers in every field of organizations in government custody. There should be at least more e-learning school from nursery to tertiary institutions depending on the population strength. It creates an atmosphere for early introduction of children to e-learning practice which is intended to foster quality education.

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