



Covid-19 and the Educational Sector: Challenges and the Need for Inclusive Education in Nigeria

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Authors' contributions

This work was carried out in collaboration between both authors. Author EPA designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Author JP managed the analyses of the study and managed the literature searches. Both authors read and approved the final manuscript.

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ABSTRACT

The Covid-19 pandemic has become a global concern not only due to the high mortality rate attributed to the diseases, but also its adverse effect on the education sector and the economy at large. This qualitative paper therefore, examines how Covid-19 influence the Education Sector and the need for Inclusive Education in Nigeria. This paper reviewed literature that studied the relationship between Covid-19 and Education mostly in Nigeria. The findings show that inclusive education which involves granting equal opportunities to quality education for all students regardless of any challenges or socioeconomic background is not widely practice in Nigeria. This is because most of the gains accruing from inclusive education are not evenly spread across households and communities in Nigeria. Some of these benefits include: inclusive society through quality education that promote sense of belonging; improve platform of learning that reduces educational gap due to varying abilities; promotes cultural respect and opportunities to develop friendship. Some of the challenges to inclusive education include poor funding of the education sector; poverty level among Nigerians; poor electricity power supply; inability of parents to support home learning and

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inadequate and qualified personnel. This paper recommends school authorities to prioritise transformation from tradition to e-learning methods and enforce staff training on Information and Communication Technology.

Keywords: Covid-19; inclusive education; online learning; digital divide; inclusive society; home learning and Pandemic.

1. INTRODUCTION

An acute respiratory disease caused by a severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) that surfaced in China in late 2019, continues to spread rapidly across the globe causing serious concerns. In March 2020, the World Health Organization (WHO) classified COVID-19 as a pandemic, with reference to over 3 million cases and 207,973 deaths in 213 all-round the world (WHO, 2020). This wide spread disease had not just become a public health crisis of great concern, but had also significantly affected the global economy. A notable economic impact had already occurred across the globe as a result of low productivity, increased death rate, shutdown of business activities, foreign trade disruption, and a negative impact on the tourism industry. This contagion initially emerged in Wuhan city, Hubei Province, China on December 8, 2019, which caused pneumonia-like symptoms in a cluster of patients. On January 20, 2020 the WHO released a situation report-1 for COVID-19 pandemic indicating 282 laboratory-confirmed cases and 6 deaths globally which has drastically increased to 21,294,845 laboratory-confirmed cases and 761,779 deaths as on August 16, 2020 (WHO, 2020).

Aside the great burden added to the healthcare systems by the pandemic, COVID-19 has had a significant negative economic effect globally. The COVID-19 pandemic had caused direct impacts on income as a result of the increase in death rate, absenteeism to work, low productivity and had created a negative supply shock, with a slowdown in the productivity of manufacturing activities due to global supply chain disruptions and closures of factories. For instance, China's production index in February decreased by more than 54% as compared to that of January 2020 (NBS, 2020).

Governments across the world placed diverse levels of restriction on movement and forced many businesses to temporarily shut down while exempting providers of essential services who strictly observe social distancing rules. Similarly, the effect of the pandemic has been grossly felt in the educational sector. According to the United

Nations Educational, Scientific and Cultural Organization (UNESCO) Monitoring report on COVID-19 educational disruption and response, an estimated 1.725 billion learners have been affected as a result of schools closure, representing about 99.9% of the world's student population.

All over the world, schools have been forced to close, and Nigeria is not left out, precisely on 19 March 2020, the Federal Ministry of Education approved school closures as a quick response measure to the spread of the pandemic. Nigeria's educational system had a devastating experience due to the outbreak of the pandemic, making children from poor families to bear the brunt of it. Although, prior to the pandemic a UNICEF report states that 10.5 million of the country's children aged 5-14 years are not in school. Only 61% of 6 to 11-year-olds regularly attend primary school. Some states in the north east and north west of the country have more than 50% of the girl child not enrolled in schools as marginalisation ensures that girls are deprived of basic education [1]. Before the pandemic, a struggle was on going to ensure young children stay in school and have access to proper education, as Nigeria contributes approximately 20% of the total global out-of-school population.

Most developed countries like Canada, United States, and around the euro zone have embraced an inclusive system of education through digital system of learning to cushion the effects of the pandemic on the educational sector. Virtual interactions are increasingly adopted to replace face-to-face engagements and limit the total disruption to many sectors. UNESCO has recommended the use of distance learning programmes, open educational applications, and platforms by schools and teachers to reach learners remotely. These systems of learning could include integrated digital learning platforms, such as, video lessons, television and Radio broadcast, and Massive Open Online Courses (MOOCs). The success of these recommendations' hinges on the use of high-technology or low-technology solutions, which are based on the reliability of local power supply, internet connectivity and digital skills of

teachers, students, parents, caregivers, and guardians which is most Nigerian's do not have access to.

According to a 2019 Executive Summary on Poverty and Inequality by the National Bureau of Statistics, 40.1% of the population in Nigeria, the largest producer of oil in Africa, are classified as poor. That is, on average, four out of 10 Nigerians has per capita expenditure below \$400. With covid-19 pandemic revolutionizing digital and online education globally, children from poor homes and those in rural and underserved communities in Nigeria, are being left behind as they are not equipped to adapt or transition to the new methods of learning. Estimating the effect of the pandemic on the educational sector might be difficult, but the glaring questions remains, is the Nigerian system of education inclusive and were the estimated 46 million students forced to stay at home during the lock down still learning? Mainly, with the uncertainty regarding how long schools will remain closed. Furthermore, in a country like Nigeria with an epileptic power supply, another reality hits. Do all homes have access to electricity to view television programs and other forms of digital system of education? Certainly, the pandemic has unmasked substantial inequities in the Nigerian education sector; therefore, this chapter highlights the Benefits of Inclusive digital education program and the need for Nigeria Education sector to explore this approach of education to bridge the gap in the educational sector.

1.1 Inclusive System of Education

After the announcement of a temporal lock down of schools in Nigeria by the Federal Ministry of Education, the Ministry's school-closure directive did not provide any clear-cut policy measures on how to mitigate this disruptions learning for children or address the digital divide accompanied by this policy. Prior to the pandemic, there have been efforts geared towards addressing educational inequity and ensuring that children everywhere are learning and have access to education needs. One of such is the Inclusive education program.

Inclusive education, as identified by Inclusive Education Canada, is about ensuring access to a quality education for all students by effectively meeting their diverse needs in a responsive way. It is about how we develop and design our schools, classrooms, and programs in such a

way that all students can participate and learn concussively [2]. In an Inclusive system of education all students, regardless of any form of challenges encountered by the children, are placed in age-appropriate general education classes within their neighbourhood schools to receive high-quality instruction, support and assistance that will enable them succeed in the core curriculum. This system of education is the most effective system that provides a fair chance for every child to be educated and develop the skills needed to thrive in life. It means all children in the same regular classrooms, in the same schools. It also provides real learning opportunity for groups who have been excluded not only children with disabilities, but speakers of minority languages too.

The main driving principle of this system is to make all students feel welcomed, challenged and adequately supported in their efforts. It's also critically important that the adults are supported, too. These includes the regular teacher, the special education teacher and other staff and faculty members who are major stakeholders which also includes parents. The philosophy of 'inclusive education' is based on the assumption that every student must first be enrolled in a general classroom in the initial stage. However, depending upon the special needs of selected children they could then be moved into a comparatively restrictive environment that suits the special needs of the children. Hence the concept 'home based education' which was in restrictive use in earlier times has become more popular and handier in the philosophy of 'inclusive education' which can be a key driver of 'inclusive growth' [3,4].

Inclusive systems value the unique contributions made by students from different backgrounds and allows diverse groups to grow side by side, to the benefit of all. Although academic progress might grow slowly, because Inclusive systems entails changes at all levels of the society. At the school level, all teachers must be trained, school buildings must be renovated and students must receive accessible learning materials. While at the community level, stigmatization and discrimination must be kicked out and parents and other individuals need to be adequately trained on the benefit of inclusive education. Finally, at the national level, Governments must create and implement their educational policies to be in line with the Convention of Child Right and regularly collect and analyse data to ensure children are reached with effective services.

1.2 Benefits of Inclusive Education

Inclusive approach of education entails that every child gets educated in a conventional classroom. However, this does not imply that individual children cannot leave the classroom for specific reasons. For instance, a child with special need may require one-on-one assistance in a particular subject. This may take place during regular class time or at home with the guidance of the teachers and parents [3]. Once schools are inclusive, serious thought is given to how often a child may be out of regular classroom and the reasons that this may be happening. It does not mean that children with certain characteristics (for example, those who have disabilities) are grouped together in separate classrooms for all or part of the school day. The benefits of inclusive education to all children is shown below. Inclusive education if properly implemented is very important because:

- With inclusive system of education children are able to participate in their community and develop a sense of belonging, becoming better equipped for life in the community as children and adults. Inclusive education is now globally accepted as a useful policy in promoting an inclusive society. In particular, as a result of the diversity among people in society, promoting inclusive education for all would enable people to accept each other and co-exist [5,6]. Following the adoption of international framework agreements such as the Salamanca Statement and the United Nations Convention on the Rights of Persons with Disabilities, many countries across the globe are reforming their education system to enable all students to have equitable access to education [5,7].
 - This system of education also provides opportunities for learning at home or within the regular classroom. Children are often better motivated when they learn in classes surrounded by other children or at home under the supervision of their teachers or parents. Inclusive school communities are educational settings in which students have opportunities to participate and receive support in all aspects of school life alongside peers. In an inclusive system, special educators, specialized instructional support personnel, general educators, and other education personnel work together to address the
- needs of students. By collaborating, these educators better support the learning and participation of the children. The enrolment of children in regular education either in the classroom or home base would be beneficial to their academic, social, emotional and personal progress [8-10]. Nevertheless, parents of children should be aware that inclusive policy will make available the needed supports and services that will have positive impacts on the achievement of their children [11]. This approach of education will encourage and develop the cognitive and sensory skill of children with diverse abilities to learn in regular classrooms. This ambitious inclusive approach requires that key stakeholders such as parents, teachers, peers and policymakers collaborate and contribute towards the development of a school system where the needs of all students including those with disabilities are effectively addressed.
- It provides all children with opportunities to develop friendships with one another. Friendships provide role models and opportunities for growth. Inclusive learning environments provide students with many opportunities to establish relationships with their peer group. Such relationships form the beginnings of friendships that are a source of fun and enjoyment, and an essential source of emotional support during challenging times. Friendship contributes most to one's quality of life; therefore, the opportunity to connect with a diverse group of peers is an important outcome of inclusion for all students.
 - The inclusive system of education fosters a culture of belonging and respect, providing an opportunity to learn about and accept individual differences. Every human being needs to gain a sense of belonging. However, the practice of sorting, tracking, and separating students is still institutionalized in much of public education. An education in more restrictive environments should only occur under the law if the student cannot be satisfactorily educated in the general education classroom even with supplementary aids and services [12,13]. Inclusive system to education challenges practices of separating students and their underlying assumptions. As educators become more successful implementing inclusive method of learning, fewer students are at risk for

experiencing segregation and its potentially devastating effects on learning. By attending their regular schools and being engaged in all aspects of academic activities, students become actively involved in the communities where they live and can make friends and learn with other children. Inclusive education promotes a positive school and home base climate for children with different backgrounds

- Inclusive system of education encourages the involvement of parents in the educational activities of their children and the activities of their local schools. Inclusive approach requires that key stakeholders such as parents, teachers, peers and policymakers collaborate and contribute towards the development of a school system where the needs of all students including those with disabilities are effectively addressed. For instance, effective collaboration between teachers and parents has been identified as one of the pillars of inclusive education [8]. Specifically, teachers and parents would share information and work together to enhance the learning experiences of students in regular classrooms (11, 6). This demonstrates the need for policymakers to develop the capacity of parents as part of reforming the education system. In developing countries such as Nigeria, it appears the public awareness campaign to promote positive attitudes and commitment among key stakeholders towards the implementation of this system of education has been limited to developing teachers' abilities and capacities to teach in the regular classrooms [14,7]. Despite a strong need to involve parents in the teaching and learning process especially at home, educators are yet to involve them in the implementation processes. as much as the teachers and school leaders have to receive the necessary supports to demonstrate positive attitudes and confidence in the implementation of inclusive education [7,15-17], it is also necessary for parents to have an in-depth understanding to enable them demonstrate vibrant attitudes towards inclusive education [18]. For example, the commencement of inclusive education is dependent on the willingness of parents to enrol their children in regular classrooms.

As primary custodians who make important decisions with and/or on behalf of their children [10], parents should be assured that the enrolment of their children in regular education would be beneficial to their children's academic, social, emotional and personal progress [8,19,20]. It is therefore important for regular monitoring of parents' perceptions to understand their perspectives about the implementation of inclusive education. Unfortunately, in the Nigerian context, parental perceptions of implementation of inclusive education have received scant attention in the research literature. With the current situation faced by the world where children are expected to learn from home because of the pandemic, the responsibility of educating and supervising the academic activities of children to a great extent relies on the parents. Currently, parents have to establish a routine that factors in age-appropriate education programmes that can be followed online, on the television or through the radio. Also, factor in play time and time for reading and Use everyday activities as learning opportunities for your children to ensure continuity of learning in a home base system of education.

1.3 Challenges of the Inclusive Education

Expectedly, the inclusive system of education is confronted with some challenges, these challenges are discussed below:

- **Funding:** One of the basic components of inclusive education, especially during a pandemic like COVID-19 is virtual learning which is costly to maintain. Funding has been a cardinal barrier to educational advancement in Nigeria. This is also a worsening factor to the problem of inclusive education. While, developed countries have long past the basic challenges of online learning, developing countries like Nigeria are still battling infrastructural issues of classroom buildings, seats, toilet facilities and quantity and quality of teachers. Due to poor funding, many schools have limited or completely lack infrastructures for remote learning. Abbey and Hoxley [21] reported that very few schools have the financial and technical ability to set up and also maintained virtual equipment and laboratories where students and their

teachers can work together to stimulate experiment.

- **Financial implication and poverty level among Nigerians:** In addition to infrastructures for remote learning, cost of internet devices and data are still relatively expensive in Nigeria. Affording these digital devices and internet connectivity is difficult and sometimes impossible to many families in Nigeria, especially among the low-income households. Ngumbi [22] added that many parents in Nigeria cannot afford three square meals, not to talk of buying mobile phones, laptops or data charges to enable their children participate in online learning. The Education Partnership Centre [23] also reported that some parents in their study explained that their inability to support their children's learning during the pandemic was as a result of the cost of remote learning. Therefore, it is difficult for the children from poorer households to benefit from inclusive education.
- **Inefficient electricity power supply:** Another common medium to enhance inclusive education is broadcast lessons through devices like the television. Unfortunately, most households that own's television are confined to the urban areas due to the presence of electricity. This electricity is inefficiently supplied to effectively achieve the goal of visual learning, talk more of the rural communities that are completely cut-off from electricity supply. Report from e-Learning Africa (2020) stated that movement to online learning will primarily benefit already privileged urban communities that have access to infrastructure especially power supply while, marginalizing the underserved rural communities widening digital and education gap. This means that there are thousands of students who cannot partake in online teaching because they live in rural areas that do not have means of power supply [24].
- **Abilities of parents/caregivers to support home learning:** Most platforms for remote learning requires guidance from parents especially at the primary school level. This is sometimes problematic since parents must be literate and vast in the area of studies and also requires parents/caregivers time to be available to education providers. This is a real challenge in Nigeria especially in a situation where parents have poor educational background and others have busy work schedule that will not allow them support their wards at home.
- **Lack of cooperation among education stakeholders:** Poor communication found among students, parents, teachers and public and school administrators to a greater extend prevents the success and benefit of inclusive programme. Clear communication that is focus driven and systematic planning between stakeholders of education are important mechanisms for inclusion education to work [2]. Deliberate opportunities should be created where teachers and specialists can discuss constructed plans based on identify gaps that can promote specific goals to meet individual needs of students. Teachers and parents must collaborate through similar objectives of meeting student's needs and facilitates home base learning.
- **Inadequate and qualified personnel:** Another problem is the issue of qualified personnel. About 90% of the regular teachers in the Northern western region of Nigeria lack the basic skills in special education. For instance, a teacher with no basic skills in special education may not see the need to specify directions or positions when describing certain things or ideas in a class with visually impaired students. In a study carried out by Ajuwon [14,25] on inclusive education in Nigeria, the scholar arrived at the following findings: 'While most participants stated they were tolerant of the diverse behaviours of their students within the inclusive setting, they were less confident in their abilities to manage the unique characteristics common to students having special needs. This lack of confidence in their professional competency may indicate limited training and/or exposure to inclusive practices'. Specifically, the study found that 'In terms of educational qualification, both a greater tolerance of potentially negative behaviours and a greater understanding of the needs of students with sensory disabilities were associated with higher formal training. The motivation of participants who have acquired advanced professional training may have led them to embrace new conceptualizations in the emerging field of

inclusive education. This is a positive finding which underscores the necessity to provide ongoing professional development and training to special educators. In other words, the higher the qualification of the regular teacher, the more positive attitude the teacher is likely to demonstrate towards the notion of inclusion.

- **Accessibility and assessment:** It is difficult to access students when there is lockdown due to COVID 19 especially with respect to online learning. This is because of the problem of power supply and the inability to student to acquire devices and data. For instance, Data from World Bank (2020) shows that 80% of Sub-Sahara Africa students lack internet facilities in their homes. Even, where there is some level of accessibility, assessing students in terms of assignment and exams becomes difficult. The matter of establishing interaction between students and teachers to enable questions and answers is also a challenge. In respect to general classroom learning, there should access first of all to the place of learning. For instance, special arrangement to allow free movement in and around classrooms and hostels, especially where students with disabilities have to use wheelchairs. There should be access with respect to door handles, elevators, pathways and recreational centres, to encourage the sense of belonging by disabled students. Therefore, for this system of education to be successfully implemented some major facilities around schools must be put into place to meet the needs of every child.

These challenges if not properly handled will place a huge stumbling block to e-learning in Nigeria. After handling the infrastructural facilities of e-learning, there is need for orientation and reorientation for acceptability especially among rural dwellers in Nigeria. Mostly, cultural factors especially language barrier has continued to enlarge the digital divide between rural and urban dwellers. Software to translate e-learning into local languages will go a long way in encouraging online learning among rural dwellers.

2. CONCLUSION

The inclusive education policy indicates that children and youth in general have every right to an education that will inculcate in them the

requisite knowledge and survival skills in society necessary for the Inclusive growth of the country. But with the prevailing closure of schools a measure employed to curtail the spread of the pandemic, it is really difficult to ascertain if a good percentage these school children are still engage learning activities especially with the current system of education been ran in Nigeria. Although most countries around the world have embraced an inclusive system of education through digital system of learning to cushion the effects of the pandemic on the educational sector. For example, Chinese provided flexible online learning that covers hundreds of million students to learn home [26]. Online learning platforms were also the most popular method of impacting knowledge in the COVID-19 pandemic period among the OECD countries [27]. Unfortunately, the story is different for many schools in Nigeria where school children were redundant at home due to lack of power supply and no access to digital devices. This study recommends school authorities to take it a priority to transform learning from traditional methods to modern e-learning methods beyond COVID-19 pandemic. This will be possible by building of e-learning facilities in both private and public schools; policies to enforce staff training on ICT related courses should be in place; Government should also increase effort in providing stable power supply to ease online learning and also encourage local industries to manufacture digital devices necessary for online learning. Therefore, this paper identifies the major benefits of inclusive approach to education as well as some challenges in the implementation of this system of education.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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