

# DEVELOPING ALTERNATIVE TEACHING CONTINUITY PLANS TO MOVE CLASSROOMS ONLINE AT COVID-19 ERA IN NIGERIA

## CHAPTER TWENTY-ONE

### SOCIO-ECONOMIC BACKGROUND AND STUDENTS EQUITABLE ACCESS TO DIGITAL LEARNING DURING THE COVID-19 CRISIS IN NIGERIA

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#### **Abstract**

The covid-19 pandemic presents the greatest test the world has faced since the Second World War and the formation of the United Nations. In the absent of a vaccine or other pharmaceuticals to prevent or treat COVID-19 infection, Nigeria government joins the growing list of countries all over the world which have adopt non-pharmaceutical measures in slowing down the spread of infection, through interventions like lockdown, closure of borders, social distancing and closure of schools. To mitigate the impact of school closure on student learning, schools in Nigeria adopt alternative services of digital learning. Access to digital learning varies on available equipment and internet connectivity. An indication that there may be inequalities in students' access to digital learning due to socio-economic background factors. Therefore, this chapter examined concept of socio-economic background, equitable access to digital learning, COVID-19 and school closure in Nigeria. It equally looked at the meaning of digital learning, benefits of digital learning in the period of COVID-19 and beyond, socio-economic background factors that hinders equitable access to digital learning in the period of COVID-19 crisis. Finally, it was suggested that government should make adequate provision of hardware and software for internet accessibility for all categories of homes, students and teachers.

**Keywords:** Socio-economic background, equitable access, digital learning, COVID-19, home educational resources, parents and students' digital competences.

#### **Introduction**

The World Health Organization (WHO) first declared COVID-19 a world health emergency in January, 2020. The virus was first diagnosed in Wuhan, China. Since then, it has shifted the focal point of infections from china to Europe, especially Italy in early

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March and to the United States in April, 2020 with accelerating number of infections, and Nigeria in 27<sup>th</sup> February, 2020. Presently, Nigeria is having 44,890 COVID-19 cases. The infection has sickened more than several million people worldwide with thousands of fatalities, (Congressional Research Service, 2020) and the United Nations, (UN) (2020) also observed that the COVID-19 pandemic presents the greatest test the world has faced since the Second World War and the formation of the United Nations. In the absent of a vaccine or other pharmaceuticals to prevent or treat COVID-19 infection, Nigeria government joins the growing list of countries all over the world which have adopt non-pharmaceutical measures in slowing down the spread of infection, through interventions like lockdown, closure of borders, social distancing and closure of schools. These measures are geared towards isolating infected persons and their contacts. As at April 16<sup>th</sup>, 2020 the covid-19 driven school closures have impacted over one billion students (UNESCO, 2020) in 188 countries (Trade Union Advisory Committee (TUAC), 2020). As a result of the school closures students and teachers at all levels of education cannot meet physically to engage in teaching and learning.

Admittedly, in a way to mitigate the negative impact of the restriction and school closure on students learning, schools in Nigeria adopt alterative services of digital (remote) learning. The essence is to mitigate for lost time in continuing education services. In this way, teachers are to supply students with teaching materials and instruct students directly via remote digital tools. However, engaging in digital learning according to the Trade Union Advisory Committee (TUAC) (2020) demands appropriate hardware, software, and high-speed internet connection. Besides, access to digital learning varies on available equipment and connectivity. This means that there may be inequalities in students' access to digital learning due to socio-economic background factors. Giving credence to this, the United Nations, (2020) affirmed that the quality and accessibility of distance learning can be expected to vary greatly both across and within socio-economic background. To aid a proper understanding of this chapter the following issues are pursued:

1. Concept of socio-economic background
2. Equitable Access to digital learning
3. COVID-19 and school closure in Nigeria
4. Meaning of Digital learning
5. Benefits of Digital Learning in the period of COVID-19 and beyond
6. Socio-economic background factors that hinder Equitable access to digital learning in the period of COVID-19 crisis.
7. Suggestions

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### **Concept of Socio-economic Background**

Socio-economic background highlights the position of individuals, families and other units on one or more dimensions of social stratification. It could be defined more objectively by using such indices as occupation, income, education and place of residence. It is assumed that the society is divided into different strata based on the possession of social and economic amenities. The stratum which an individual occupies in the socio-economic stratification represents his social class. Thus, socio-economic background is the social standing or class of an individual or group. It can be categorised into two such as high socio-economic background (made up of upper and middle classes) and low socio-economic background (made up of lower classes). As such, in any society, there is social stratification, that is, the organization of society in hierarchical order which deals with inequality in society in terms of services, obligation, power and prestige (Oniyama & Oniyama, 2002). Oniyama and Oniyama (2002) view shows that there is social hierarchy among students in schools at all levels based on their family socio-economic background in terms of occupation, income, parent level of education, and place of residence. Therefore, there are student from high socio-economic background (advantaged family background with good provision of social capital and materials need by the child in his educational pursuit etc) and low socio-economic background (disadvantaged family background in deprived neighbourhoods that lack good social capital, educational resources, etc).

**Equitable Access to Digital Learning:** Equity suggests fairness of opportunity to education (digital learning) as a fundamental human right. This seems to agree with Onwuka (1997) contention that equity has to do with distribution; the fairness or impartiality with which a given entity has been distributed. It entails the removal of restrictions on natural capabilities and social arrangements but which are product of social factors such as socio-economic variation (Mohammed, 1999). In effect, equity means equality of all people, ensuring that all segments of the society get their fair share of whatever educational opportunities are provided. It is a situation which makes it possible for everyone to have equal opportunity of being educated at whatever level (Oyebade, Oladipo & Adetoro, 2007). To this end, equity implies that opportunities for self-advancement through education (digital learning) be distributed evenly among all strata of members of the society irrespective of circumstances of birth, ethnic, origin, religious belief or social states and socio-economic background (Tonwe, 2005).

However, UNESCO (2020) averred that the alternative service of digital learning may exacerbate inequality in education that it may leave those (students) in already

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disadvantaged socio-economic background further behind. UNESCO argued that digital learning may work better for those students from advantaged socio-economic background due to better connectivity and higher initial digital skills; and many countries, have challenges in ensuring that digital learning services are equally accessible by all students. In essence, students from low socio-economic households are at a disadvantage for continuing their study and learning at home (TUAC, 2020).

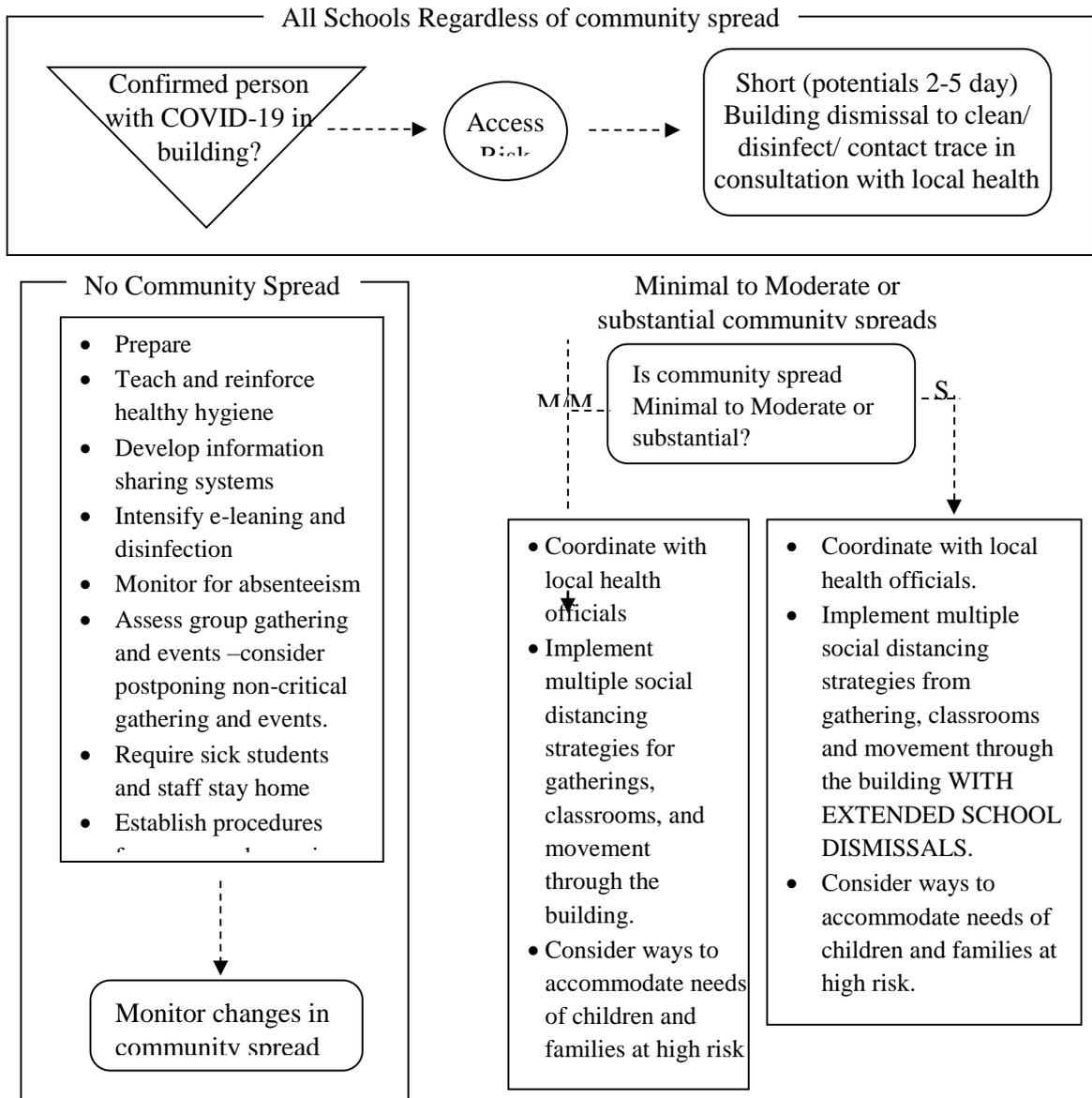
### **COVID-19 and School Closure in Nigeria**

The name coronavirus comes from the Latin word “corona” which means crown or halo. When view under an electron microscope, the virus looks like it is surrounded by a solar corona (Ogunode, Abigeal & Lydia, 2020). The coronavirus also referred to as Severe Acute Respiratory Syndrome (SARS) or SARS – Cov-2 was previously known to be associated with animals. Until it was first diagnosed in Wuhan, China to be associated with humans and humans to human spreading of the virus has also been confirmed.

On March 11, 2020, the World Health Organization (WHO) announced that the outbreak of the COVID-19 was officially a pandemic, the highest level of health emergency (Congressional Research Service, 2020). The Congressional Research Service (2020) reported that a growing list of economic indicators makes it clear that the outbreak is negatively affecting global economic growth on a scale that has not been experienced since at least the global financial crisis of 2008-2009.

Moreover, while forecast is being made to consider when the speed of the transmission or spread of the COVID-19 infections may end, effort to contained it have been made by government or countries over the world such as border closure, social distancing, banning of large gathering of people and school closure. The United Nations Educational, Scientific and Cultural Organisation (UNESCO, 2020) stated while Covid-19 is primarily affecting public health, spillover effects can already be observed in education, stemming largely from extended school closures, with attendant impact on over one billion students in over 188 countries. Nigeria equally joins the list of countries that directed shut down of schools to mitigate the accelerating spread of the virus. In this regard, Ogunode, Abigeal and Lydia (2020) observed that the permanent secretary in the Federal Ministry of Education, Sonny Echono, told reporters on 19<sup>th</sup> March, 2020 that the directive was part of the country’s overall strategy to contain the spread of the virus (COVID-19). Thus, Nigeria is among Africa countries who have taken decision to close down schools at all levels. In this respect, the Centre for Disease Control (2019) provided a decision tree that government may find useful in considering decision process for closing schools as indicated in figure 1:

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**Figure 1:** Decision process for closing schools

**Source:** The Centre for Disease Control (2019). Considerations for school closure <https://www.cdc.gov/coronavirus/2019-ncov.download/considerations-for-school-closure.pdf>

### Meaning of Digital Learning

Digital learning (remote learning) represents tools and platforms through which students have good access route to teaching, learning and materials (Naidoo, 2003). Digital learning tools and platforms make delivery of lesson flexible, interactive and long lasting (Emesini & Nduanya, 2013). It enables teachers to communicate, instruct or provide students with up to date learning materials and information using devices like computers, tablet, mobile gadgets and platforms like facebook, zoom crowd, google drive, seasaw, youtube, screen-castly etc. In this respect, TUAC (2020) stated that digital learning demands appropriate hardware, software, and a high-speed internet connection. The hardware covers infrastructure like computer, tablet, mobile gadgets, etc. Reimers and Schleicher (2020:20) listed some of the major software (platforms) to include: (a) Google, Google classroom, Google suite, Google hangout, Googlenext, (b) Facebook (c) Microsoft one note (d)Microsoft SEQTA, education perfect (e) Google Drive/Microsoft teams, (f) Moodle (g) Moodle (h)Zoom (i) Seesaw (j) manageBac (k) Ed Dojo (l) Ed modo (m) YouTube (n) Youtube, (o) ebschost, progreatis, (p) PHET (q) Screen castly and (r) RAZ peids.

UNESCO (2020) and Mustafa (2020) identified other platforms to include video lessons, online virtual lessons, downloadable lessons, WhatsApp groups, e-mail and conference lesson. Several schools in Nigeria have been able to rely on some of these digital online platforms to continue instruction and interactions between students and teachers. Thus, with its enriched online platforms, digital learning provides direct interaction between teachers and students of varied socio-economic background (Emesini & Nduanya, 2013).

### Benefits of Digital Learning in Era of COVID-19 Crisis and Beyond

The benefits of digital learning among others include the following:

1. It helps to minimize learning losses
2. It aids learning rate of students
3. It facilitates retention and stimulates students' attitude towards learning
4. It aids teacher students' instructional interactions
5. It aids online test and evaluation of student's performance
6. It enables students to learn from home under the supervision of their parents (TUAC, 2020)

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7. It aids pedagogical continuity and regular contact between the students and their teachers.
8. It provides encouragement to schools and teachers to use online resources (Reimers & Schleicher 2020).
9. It aids students learning, as well as enhances their skills for independent learning and study increases.
10. It increases the autonomy of students to manage their own learning (Reimers & Schleicher, 2020)

Other benefits of digital learning have been identified by Alumode (2013: 6-7) to include:

1. Made it possible for the learner to access the learning programme anytime convenient to him and can log in anywhere.
2. It has brought about asynchronous interaction, providing participants and teachers with time to prepare their response leading to succinct and to-the-point intervention and on-track, thoughtful and creative conversation.
3. It has enhanced group collaboration creating shared electronic conversation. Aided by group coordinators, these sessions can be powerful for leaning and problem solving.
4. It has encouraged the use of new educational approaches. For example, faculty from anywhere in the world, and faculty teams with different specialties can be put together and innovations of teachers can be shared among themselves for improvement and adaption
5. It has enabled intelligent computer assisted instruction programmes to generate and solve problems, diagnose student's misconceptions, select appropriate teaching strategies and carry on dialogue with students based on in-depth studies by researchers on how people think, learn and solve problems.

### **Socio-Economic Background Factors that Hinder Student Equitable Access to Digital Learning in the Period of COVID-19 Crisis**

The major socio-economic factors that hinder students' equitable access to digital learning in the period of COVID-19 crisis include the following.

1. **Home Educational Resources:** Home educational resources for digital learning are made up of computers, tablets, mobile gadgets, high broadband internet facilities, printing facilities, television and digital learning platforms tools. These educational resources are not guaranteed for all students, especially across households. (TUAC, 2020). According to the International Network for School Attendance (INSA 2020) children (students) will still miss learning during this "new normal" digital learning because they are in under-resourced families or

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communities (low socio-economic status, minority group, homeless, refugees, neglect, etc). Hence, the United Nations reported that poor households have less secure sources of income and power tools to connect to distance (digital) learning whether a television, a radio, or an online device. This situation is challenging to equitable access to digital learning in the period of COVID-19 crisis.

- 2. Internet Connectivity:** There is still low internet connectivity and penetration in Nigeria (Alumode, 2013). This is a serious hindrance to students' equitable access to digital learning in the period of COVID-19 crisis. However, low internet connection and penetration are more obvious in low socio-economic background households and regions. Reimers and Schleicher (2020) observed that although the unexpected positive educational result of the school closure due to the COVID-19 resulted in the introduction of technologies and other innovative solution to effective teaching and learning, as well as, possibility for students to independently manage their own learning/study but the readiness for teachers and students to engage in teaching and learning during the pandemic is still questionable. They noted that digital learning do not just require place to study at home, but tools and must especially internet connectivity and penetration which students and teachers can use to provide and access the learning contents. They, however, reported that there is a huge gap across socio-economic groups in terms of internet connectivity. They assist that while virtually every 15 years-old in socio-economically advantaged students in the United States has a computer connect to the internet in their homes, but only three out of four students in disadvantaged homes have one. In peru, it is 88% of students in high socio-economic background but just 17% in low or disadvantage of socio-economic background who have a computer connected to the internet for learning. The situation in Nigeria may not be different for students from disadvantage of socio-economic background households, going by the recent statistics that more than 70% of Nigerians live below US one dollar (₦492) per day. This indicates that most household are without internet connection for their children to access digital learning content.
- 3. Parental Level of Education:** Reports exist in different research works that parents who have formal education sec the need for adequate monitoring of their children learning, as well as struggle to provide educationally rich and stimulates home for their children (Yara, 2010; Obasuyi & Igbudu, 2012, Adeyemo & Babajide, 2012; Osanwa, Adejobi, Iyam & Osanwa, 2013). Mustapha (2020) observed that when schools close, parents are often asked to facilitate the learning of children at home and can struggle to perform this task. He noted that, this is especially true of parents

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with limited education and resources. These situations do not favour students from disadvantaged socio-economic background, most especially in this period of covid-19 crisis to access digital learning contents.

4. **Parent's Fluency in Language of School Instruction:** There is wide gap in fluency in language of school instruction among parents. The longer the digital learning goes on during the covid19 period and beyond, the less parents that lack fluency in language of school instruction can keep up. As a result of this lack of fluency in language of school instruction, there will be poor learning stimulation. Younger children may be hit harder than older ones as their dependence on parents is higher. They need coaching in their learning process, plus access and help with mastering digital devices (TUAC, 2020). Besides, most parents from disadvantaged socio-economic background do not have the ability to (1) manage students behaviour and the use of time during digital learning, (2) Sustain their children (students) involvement and monitor learning, (3) Use appropriate curriculum materials, and (4) communicate with clarity and correctness (Andrew & Barnes in Ume, 2002). Thus, parents' fluency in language of school instruction, their ability to monitor their children learning and make appropriate use of information are some crucial factors that will hinder student equitable access to digital learning during the covid-19 period.
5. **Parents and Student Digital Competences:** A lot of parents and students were not prepared for digital learning. In the case of ongoing digital learning, a key question according to TUAC (2020) is, "will really no student be left behind?" of course the students from disadvantaged socio-economic background according to Reimers and Schleicher (2020) do not have equal digital competence or knowledge or to have access to course materials and about to carry out the home work or exercises required for their learning during the covid-19 crisis. TUAC (2020) puts it this way:

*School closures bring difficulties for students of disadvantaged groups. The gap in competences might widen as they (students) do not have the same learning conditions and support. The longer the remote (digital) learning goes on, the less they (students from low socio-economic background) can keep up... Students from families with lower educational attainment levels, children from vulnerable positions might suffer most from the current situation p.5.*

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Advances in technology and the phenomenon described as digital learning, requires students and teaches themselves to demonstrate the ability to do problem solving, higher order thinking and use modern information technology (Ume, 2002). This situation, however, may not equitably favour students from disadvantage socio-economic background.

### **Suggestions**

Digital learning has enormous advantages. It facilitates the task of the teacher by promoting performance enhancing independent study among students. It has been pointed out that gap and disparity in access to digital learning most especially in this period of Covid-19 is a rising phenomenon in the world in general and Nigeria in particular (Reimers & Schdeieher, 2020; TUAC, 2020). If digital learning is rapidly adopted as a respond to the school closure and to mitigate for lost time in continuing education services, then the issue of socio-economic background disparity in accessing digital content by students need to be looked into. Merely adopting digital learning without hitherto not observing home educational resources, availability of space, parental level of education, parents fluency in language of school instruction, and parents/children digital competences, will not ensure equitable access for students across and within different socio-economic background access to digital content and materials. There is the need therefore to make more effort at ensuring students equitable access to digital learning across different socio-economic background during the period of covid-19 crisis and beyond in Nigeria. These strategies are necessary:

1. Government should make adequate provision of hardware and software for internet accessibility for all categories of households, students, and teachers. This would serve as a way of bridging the gap between students from disadvantaged and advantaged socio-economic background to ensure equitable access to digital learning.
2. Government can ensure equitable access to learning contents during the covid-19 pandemic by providing alternative method of digital learning in form radio broadcasting, lesson via digital television, etc. this would help students irrespective of socio-economic background to follow learning process from their home through the radio and television lesson programme
3. Increased assistance for students from disadvantaged socio-economic background. This can be achieved by putting in place containment policies to relax school closure for a small number of students for few hours per weeks, as far as health protection for students and teachers can be ensured (TUAC, 2020)
4. There should be adequate direct financial support and technical assistance for disadvantaged households to facilitate digital learning.

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5. Government should ensure that students access learning content without subscription fee in Nigeria during this period of school closure due to the covid-19 crisis.

### Conclusion

In this chapter a description and the critical issues of covid-19 and school closures in terms of socio-economic background and equitable access to digital learning were examined. The socio-economic background factors that determine students equitable access to digital learning content that were examined are home educational resources, internet connectivity, parental level of education, parents fluency in language of instruction, their ability to monitor students learning, make appropriate use of information; parents and students digital competences. In terms of suggestions to ensure equitable access to digital learning during the period of covid-19 school closure, the strategies enumerated here can be explored.

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