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## Assessing the Impact of Covid-19 Pandemic On Public Secondary School Students Education in Ekiti State

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**ABSTRACT:** *The study assessed the Impact of Covid-19 Pandemic on Public Secondary School Students' Education in Ekiti State. The study adopted a descriptive research design of the survey type. The population was 11,245 students of Ekiti State Public Secondary Schools. A total of 120 students was purposively selected from 3 public secondary schools. A questionnaire titled Impact of Covid-19 on Education of Secondary School Students was used for the study. The instrument was subjected to face and content validity. The reliability of the instrument was ascertained using test re-test method. Copies of the instrument were administered on 20 respondents who were not among sample for the study on two occasions with an interval of two weeks. The reliability coefficient of 0.81 was obtained which was high enough for the study. Data collected were tested descriptively. The result showed that the extent of impact of Covid-19 on educational system of students in Ekiti-State was moderate. The finding also revealed that the level of student's education during Covid -19 in Ekiti State was high. The study therefore recommended that teachers should be encouraged to utilize social media network for teaching so as to avoid students' idleness. Students should be more intimated with the use of social network for learning at available opportunity.*

**KEY WORDS:** assessment, covid-19, pandemic, public, secondary school, education

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### INTRODUCTION

The World Health Organization (WHO) has proclaimed a pandemic of the new Corona virus (COVID-19). The rapid 'globalization' of the COVID-19 epidemic is unprecedented in history. The COVID-19 viral infection was first identified in December of 2019 in Wuhan, China's seventh largest city. Other Corona viruses that the globe has previously encountered are the Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome

(SARS).(Chen 2020) determined that the outbreak began with staff and clients butchering animals such as pigs, dogs, rats, civet cats, rats, and snakes, among others, at a wholesale market in Wuhan. COVID-19 symptoms include fever, cough, and difficulty breathing. Existing antiviral medications are ineffective in curing it, and scientists in China, the United States, the United Kingdom, and Japan are currently racing against the clock to produce a vaccine and a drug (Sandbu, 2020). The epidemic has compelled scientists and researchers to investigate the genetic nature of the novel coronavirus, infection trends and patterns, and new diagnostic techniques. According to Baldwin and Mauro (2020), various research publications have been published since the Covid 19's start, the majority of which focus on epidemiological, demographic, and clinical aspects of the virus and its outbreak.

Covid19 was discovered to be descended from wild animals, but the precise origin is unknown. Patients infected with 2019-nCoV are the primary infection sources. The 2019-20 coronavirus pandemic appears to have impacted educational systems globally, resulting in school, university, and college closures. As of April 27, 2020, around 1.725 billion pupils had been affected by school closures as a result of the outbreak. According to UNICEF monitoring, 186 countries are currently implementing nationwide closures, with 8 countries implementing local closures, affecting approximately 98.5 percent of the world's student population (<https://en.unesco.org/covid19/educationresponse>). Cambridge International Examinations (CIE) issued a statement on March 23, 2020, announcing the cancellation of Cambridge IGCSE, Cambridge O Level, Cambridge International AS & A Level, Cambridge AICE Diploma, and Cambridge Pre-U examinations across all countries for the May/June 2020 series (<https://www.cambridgeinternational.org/news/news-details/view/update-from-cambridge-international-on-may-june-2020-exams-20200323/>). Exams for the International Baccalaureate have also been canceled (<https://www.ibo.org/news/news-about-the-ib/may-2020-exams-will-no-longer-be-held/>). School closures have far-reaching economic and societal implications, affecting not only children, staff, and families (Lindzon, 2020). School closures in response to COVID-19 have shed light on a variety of educational, social, and economic issues, including student debt (Jamerson and Mitchell, 2020), food insecurity (Lee, 2020), and homelessness (SESSOMS, 2020; Ngumbi, 2020), as well as access to childcare, health care, housing, internet, and disability services (Feuer, 2020; Barrett, 2020; Jordan, 2020). The impact was particularly severe for impoverished children and their families, resulting in interrupted learning, reduced nutrition, childcare issues, and a financial cost to families who were unable to work. In response to school closures, the United Nations Educational, Scientific, and Cultural Organization (UNESCO) advocated for the use of distance learning programs as well as open educational applications and platforms that schools and teachers can use to reach learners remotely and minimize disruption to education (UNESCO, 2020).

The Corona virus is sweeping the globe, and its impact is only now becoming apparent. Obviously, its entrance is altering everything. The news is full of tales about the need to limit

social contact, which has a detrimental influence on educational institutions' long-term viability, not to mention the impact on learning chances. Unfortunately, most educational organizations are now trying to determine their alternatives for dealing with these two key difficulties. Most countries throughout the world have school closures of some form, with hundreds of millions of pupils affected, including Nigeria, which closed schools statewide. The United Nations has warned of the unparalleled scale and speed of the educational disruption being caused by coronavirus. Currently, school closures in the country Nigeria due to the COVID-19 outbreak have disrupted the education of at least millions of students nationwide, according to the United Nations Educational, Scientific and Cultural Organization.

Coronavirus spreads mostly through contact with an infected person's coughing or sneezing. It also spreads when a person touches a virus-infected surface or object and then touches their eyes, nose, or mouth. As schools close due to the public health emergency, educators and kids around the world are feeling the astonishing ripple effect of the new coronavirus.

Non-pharmaceutical therapies and preventive measures such as social-distancing and self-isolation have resulted in the widespread shutdown of primary, secondary, and higher education in Nigeria and most other nations. Previous infectious disease outbreaks have resulted in broad school closures around the world, with variable degrees of efficacy (Simon, 2020; Barnum, 2020; Frieden, 2020).

Closing schools may postpone the spread of an outbreak, according to Mathematical modeling. The effectiveness, however, is dependent on the interactions that children keep outside of school (Claessens and Kose 2009). School closures can be successful if implemented quickly. School closures are less beneficial and may have no influence if they come late in relation to an outbreak (Simon, 2020; Barnum, 2020). Furthermore, the reopening of schools after a period of closure has resulted in increasing infection rates in some circumstances (Jackson et al., 2013). Because school closures frequently occur concurrently with other measures such as public gathering prohibitions, determining the precise impact of school closures can be difficult (Jackson et al., 2013).

School closures and public gathering bans in the United States during the 1918-1919 influenza pandemic were related with decreased total fatality rates (Barnum, 2020). Cities that implemented such treatments early had a longer time to attain peak mortality rates (Markel et al., 2007). According to a study of 43 US communities' responses to the Spanish flu (Markel et al., 2007), schools were shuttered for a median of four weeks. School closures were demonstrated to reduce morbidity from Asian flu by 90% during the 1957-58 outbreak (Chin et al., 1960) and by up to 50% in managing influenza in the United States from 2004 to 2008 (Wheeler, Erhart, and Jehn, 2010). During the 2009 H1N1 flu pandemic, multiple countries successfully halted the spread of infection by closing schools. School closures in the Japanese city of Oita were found to

successfully reduce the number of infected students at the peak of infection; however, school closures were not found to significantly reduce the total number of sick students (Kawano and Kakehashi, 2015). School closures and other social distancing measures were linked to a 29% to 37% decrease in influenza transmission rates. Early school closings in the United States postponed the peak of the 2009 H1N1 influenza pandemic. Despite the overall success of school closures, a Michigan study indicated that "district level reactive school closures were ineffective" (Davis et al., 2015).

During the 2009 swine flu outbreak in the United Kingdom, a group of epidemiologists endorsed school closures in an article titled "Closure of schools during an influenza pandemic" published in the *Lancet Infectious Diseases* in order to interrupt the course of the infection, slow further spread, and buy time to research and produce a vaccine (Wardrop, 2009). After researching previous influenza pandemics such as the 1918 flu pandemic, the 1957 flu pandemic, and the 1968 flu pandemic, they reported on the economic and workforce impact of school closure, particularly given that a large percentage of doctors and nurses are women, with half having children under the age of 16. They also investigated the kinetics of influenza propagation in France. They discovered that when Israeli teachers went on strike during the 1999-2000 flu season, visits to doctors and the number of respiratory illnesses decreased by more than a fifth and more than two fifths, respectively (Walsh, 2009).

The majority of data collected on the number of students and learners affected by COVID-19 is based on the shutdown of formal education systems. The UNESCO Institute for Statistics provides data on COVID-19 students based on the number of students enrolled in preprimary, primary, lower-secondary, and upper-secondary education levels [ISCED levels 0 to 3], as well as tertiary education levels [ISCED levels 5 to 8].

Early childhood education programs are typically targeted for children under the age of three. While many primary and secondary schools around the world have closed owing to COVID-19, policies affecting early childhood educational programs have varied. Preschools and day cares are deemed necessary services in several countries and territories, and have not closed in concert with broader school closure initiatives. The Washington State Department of Children, Youth, and Families encouraged child care and early learning centers in the United States to remain open. Some school districts may provide alternate child care choices, with first responders and healthcare workers' children receiving priority. Maryland's governor mandated that certain child care services remain available for the children of emergency officials, although Washington State and California have left it up to care providers' choice (Oyefusi, 2020). California Governor Gavin Newsom stated, "We need our child care facilities, our daycare centers, to operate in order to absorb the impact of these school closures." Colorado has supported the creation of "tool kits" for parents to use at home in order to replicate the lessons that their children would have received in their early learning programmes. In Japan, Prime Minister

Shinzo Abe ordered the closure of all schools until April 8, with the exception of children's childcare facilities. Five persons linked with a nursing institution for preschool children in Kobe tested positive for coronavirus in early March. A preschool student was determined to be having the virus after testing over one hundred youngsters at the facility (Harding and Inagaki, 2020).

COVID19 is primarily harming public health, although spillover impacts in education have already been detected, owing mostly to extended school closures. Among the most important aspects to examine are the following:

Over one billion pupils have been affected by COVID19-related school closures to date (<https://en.unesco.org/themes/education-emergencies/coronavirus-school-closures>). At the time of writing, 150 nations are reporting school closures, according to current World Bank data. When considering whether or not to close a school, several factors must be addressed. On the one hand, despite low infection rates among children, school closures are a crucial component of social distancing tactics designed to restrict the spread of the disease and avoid an increase in cases that would strain health systems. The specific timing of the closures, the age structure of the population, and the length of the closure will affect its effectiveness as a preventive technique. School closures, according to recent guidelines from the US Centers for Disease Control and Prevention (US-CDC), serve a purpose, particularly if COVID19 cases are school-based, by allowing for decontamination and contact tracing. It also acknowledges its significance as a strategy for increasing social isolation. According to the reports, a closure of 4 to 8 weeks may be required in the event of significant community spread. Extended interrupted education, on the other hand, has the ability to reverse improvements in learning results by disengaging pupils from the learning process. Disengagement of students with learning issues (academic, socioeconomic, kids with special/diverse educational needs, or persons with impairments) who may not deal adequately with remote learning practices or cannot access the knowledge comes at an even higher cost. Closed schools may prevent pupils from receiving school meals in areas where school feeding is the norm unless alternate arrangements are made. Longer school closures in secondary schools may raise the likelihood of dropout for kids, particularly those from lower-income families. School closures also have an influence on labor supply since they raise the strain on parents, who must stay at home or make new arrangements if their children must stay at home (much more so if playgrounds and child care centers are closed).

Differences in the weights assigned to these factors influence authorities' decisions about whether or not to close schools. While some governments shuttered schools out of prudence (many in Africa), a few (the United Kingdom, New Zealand, Mexico, and Switzerland) waited until recently to do so. It remains to be seen how the various measures would affect virus spread. In nations where the outbreak is isolated, some governments have chosen to close schools in the nearby vicinity or region, or schools have chosen to close as a precautionary measure or to sterilize before resuming classes.

In addition to the direct impact on education, the pandemic's indirect effects include the potential use of school facilities as makeshift hospitals, as in some low-infrastructure rural communities, the school may be the only public building available. This may result in a longer disruption of the education calendar, rendering the building inaccessible for educational purposes. Furthermore, as a coping mechanism, the practice of providing alternative services of remote learning may function better for students in households with greater connectivity and stronger starting digital skills. This further disadvantages individual who are already disadvantaged, therefore school closures with ineffective system coping measures may suggest an increase in educational inequality.

School cancellations in reaction to the COVID-19 outbreak have highlighted a variety of difficulties limiting educational access, as well as broader socioeconomic issues. More than 370 million children and youth were not in school as of March 12 due to temporary or indefinite countrywide school closures enforced by governments in an attempt to slow the spread of COVID19 (Simon, 2020; Barnum, 2020). Closures had affected over 90% of the world's learners as of March 29. Even when school closures are just short, they have significant social and economic consequences. The disruptions they produce affect people across communities, but the impact on underprivileged children and their families is more severe, including disrupted learning, reduced nutrition, childcare issues, and the resulting economic cost to families who cannot work.. Working parents are more likely to miss work when schools close to care for their children, resulting in pay loss in many cases and a negative impact on production. Localized school closures create additional strain on schools as parents and officials redirect students to open schools.

**Unintended Strain on Health-Care System:** Women make up a big proportion of health-care workers and are frequently unable to attend work due to childcare duties caused by school closures. As a result, many medical personnel are not present at the facilities where they are most required during a health crisis.

**Distance Learning:** As a result of the pandemic, several schools shifted to online distance learning systems such as Zoom.

**Unequal Access to Technology:** Students in rural locations and from low-income households may be disadvantaged due to a lack of access to technology or quick, dependable internet connectivity. Lack of access to technology or strong internet connectivity is a barrier to continuing education, particularly for pupils from low-income households (<https://en.unesco.org/themes/education-emergencies/coronavirus-school-closures/consequences>). In reaction to school closures caused by COVID-19, UNESCO advocates the adoption of distant learning programs as well as open educational applications and platforms that schools and teachers can utilize to reach out to students remotely and minimise

disruption to education. Hundreds of libraries have temporarily shuttered to help halt the transmission of COVID-19. Several major cities in the United States, including Los Angeles, San Francisco, Seattle, and New York City, announced public library closures, affecting 221 libraries. This is useful for pupils who do not have access to the internet at home, this increases the difficulty of keeping up with distance learning (UNESCO, 2020).

**Unequal Access to Educational Resources:** Lack of copyright constraints and exceptions can also have an influence on students' ability to access textbooks and study resources. Several initiatives have been launched to ensure that students and teachers have access to open educational resources and are aware of copyright restrictions. The International Council for Open and Distance Education launched a dedicated website including webinars, online teaching techniques, and teacher tools. A group of publishers in Nigeria agreed to allow virtual public readings of their publications from libraries and classrooms. In several nations, Publishers and Authors agreed on a set of extraordinary provisions to allow libraries to distribute instructional content.

A local advocacy group developed a website to allow instructors to utilize free-licensed music and video in their classes. The Maricopa Millions OER Project established a specific emergency fund to support the development of open educational resources. Over 500 civil society organizations and individuals wrote to Francis Gurry, Director of the World Intellectual Property Organization, requesting, among other things, a unique set of copyright limitations and exclusions for the duration of the pandemic. Several groups are also striving to train teachers how to manage difficult copyright circumstances.

**Childcare:** School closures place an additional burden on parents and guardians to provide childcare and manage remote learning while their children are absent from school. In the absence of other options, working parents frequently leave their children alone when schools finish, which can lead to dangerous behaviors such as increased peer pressure and substance usage.

**Using distance learning to mitigate loss of learning:** Many countries have turned to distant learning to compensate for lost time in continuing education services when schools are closed. Some countries just add resources to their websites and make more things available, but not necessarily online lessons. Others, such as Spain, are requiring professors to create online content and provide online classes. Infrastructure and tool familiarity appear to be driving the achievements (and challenges) of delivering learning. Some countries with substantial connectivity successfully offer distant learning, whereas others with little internet, cell phone, or television penetration find it challenging to reach all students equally. Furthermore, many countries face difficulties in ensuring equal access to education services for employees/students with impairments.

Providing resources for work at home can now be accomplished through the use of many technology tools. However, access to connectivity and various types of devices, as well as guaranteeing accessibility for students with impairments, varies greatly across income levels. As a result, preventing future inequities is a critical problem. Some African countries, such as Nigeria, South Africa, Senegal, Botswana, and Gambia, can begin preparing now because there is adequate school connectivity and gadgets (tablets) for children to take home. However, in most nations, students have some access to mobile devices, and optimizing accessible solutions for those should be the primary focus. Despite the fact that there is plenty of digital materials available, some of which is even free source, a crucial task for the coming weeks will be to develop pedagogical material that will be available in a structured way such that could capture the attention of all students.

Collaboration with some commercial sector companies to deliver pre-developed material is an interesting alternative to consider. Establishing relationships with telecom companies to allow for zero charges for content downloaded from the Ministry of Education (or any other agency that offers learning resources platforms) is a critical component in the topic about using cellphones. TV, which can employ captions to enable different language learners and students with impairments, or sign language interpreters to reach deaf learners, and radio can still be used, but they are better suited for lower grades (and should be prepared with children and caregivers in mind). Many countries have available material that can be rebroadcast.

Teachers' and administrators' expertise with the tools and processes, in addition to infrastructure and connectivity, are important variables in offering distance learning. In preparation for school closures, Singapore is currently teaching teachers on how to provide classes online. Some countries, such as Lebanon, have chosen to send children home with lessons as homework, emphasizing independent distance learning with the assistance of classmates and parents, which is then reinforced once school resumes.

**Use of education resources to support the general response:** In low-capacity and low-infrastructure circumstances, some countries deployed education facilities and personnel to assist the greater community throughout the crisis. For example, in places with little or no connectivity, educational facilities can be employed as information hubs for medical holding centers (once schools are closed). Attention is required in these circumstances to outline a clear roadmap to restore the schools to their original function once the crisis has passed. Furthermore, school administrators and teachers form a cadre that can be trained during the school closure to assist with initiatives such as sensitization and other social activities (for example, during the Ebola Virus outbreak in 2014, teachers in Guinea carried out advocacy work in their communities and assisted with contact tracing of Ebola patients.)



### **Purpose of the Study**

The purpose of the study was to assess the impact of covid-19 on the education of public secondary school students in Ekiti State.

### **Research Questions**

1. What is the impact of covid-19 on educational system of students in Ekiti State?
2. What is the level of students' education during Covid-19 in Ekiti State?

### **METHODOLOGY**

The study adopted a descriptive research design of the survey type. The population was 11,245 students of Ekiti State Public Secondary Schools. A total of 120 students were purposively selected from 3 public secondary schools. 40 students were selected from each of the schools in Ado-Ekiti Local Government Area of Ekiti State using simple random sampling technique. A questionnaire titled Impact of Covid-19 on Education of Secondary School Students was used for this study. The questionnaire was divided into two sections. Section A was based on the bio data of the respondents while section B consisted of 20 items on the focus of the study. Respondents were required to tick the appropriate option from strongly agree (SA), agree (A), disagree (D) and strongly disagree (SD).

The instrument was subjected to face and content validity. The face validity tests the appropriateness of the questionnaire items while content validity is concerned with the content of the test and the test items.

In subjecting the instrument to face and content validity, copies of the initial draft of the questionnaire were presented to experts in Educational Psychology and Test and Measurement. The experts critically examined the items of the instrument with specific objectives of the study and made useful suggestions to improve the quality of the instrument. Based on their recommendations, the instrument was adjudged to be valid.

The reliability of the instrument was ascertained using test re-test method. Copies of the instrument were administered on 20 respondents on two occasions with an interval of two weeks. The reliability coefficient of 0.81 was obtained which was high enough for the study.

## RESULTS

**Question 1:** What is the impact of covid-19 on educational system of students in Ekiti State?

**Table 1: Impact of covid-19 on educational system of students in Ekiti State**

S/N	Statement	Agree		Disagree		Mean
		Freq.	%	Freq.	%	
1	I have been enjoying online teaching during Covid-19	15	70.0	6	30.0	2.65
2	Covid-19 has not disrupted the implementation of teaching strategies	12	60.0	8	40.0	2.60
3	I didn't have problem with communication with my students during Covid-19	10	50.0	10	50.0	2.40
4	I readily participate during online teaching during Covid-19	11	55.0	9	45.0	2.25
5	Teaching on social media has been so difficult to impact during Covid-19	9	45.0	11	55.0	2.00
6	I have been able to cover the school syllabus during Covid-19	6	30.0	14	70.0	2.00
7	Teaching on social media makes me to get full attention during Covid-19	9	45.0	11	55.0	2.25

Table 1 presents the impact of covid-19 on educational system of students in Ekiti State. The result shows that; using a criterion mean score of 2.50 for the rating scale, three (3) out of the seven (7) items had mean scores above the cut-off point. This implies that extent of impact of covid-19 on educational system of students in Ekiti State is moderate.

**Question 2:** What is the level of students'education during Covid-19 in Ekiti State?

**Table 2: Level of students'education during Covid-19 in Ekiti State**

S/N	Statement	Agree		Disagree		Mean
		Freq.	Percentage	Freq.	Percentage	
1	I have always be on social media for learning since Covid-19 pandemic started	77	77.0	23	23.0	2.98
2	There has been regular network to enjoy learning on radio during Covid-19	66	66.0	34	34.0	2.60
3	Learning on social media has been adequately carried out during Covid-19	66	66.0	34	34.0	2.66
4	Covid-19 has brought new innovation to my learning	62	62.0	38	38.0	2.68
5	I find it interesting to study during Covid-19 pandemic	69	69.0	31	31.0	2.80
6	I readily participate during online learning Covid-19	54	54.0	46	46.0	2.61
7	Learning on social media gives me full attention during Covid-19	58	58.0	42	42.0	2.59

Table 2 presents the level of students' education during Covid-19 in Ekiti State. The result shows that; using a criterion mean score of 2.50 for the rating scale, all the items had mean scores above the cut-off point. This implies that the level of students' education during Covid-19 in Ekiti State is high.

## DISCUSSION

The result on table 1 revealed that the extent of impact of Covid-19 on educational system of students in Ekiti-State was moderate. School closures in response to covid -19 have shed light on various educational and social issues including digital learning as opined by Jamerson & Mitshell (2020). The finding in table 2 also revealed that the level of students' education during Covid -19 in Ekiti State was high. This result was in contrast to Jordan (2020) that the impact was more severe for disadvantaged students causing interruption learning, students problems and consequent educational cost to families who could not work.

## CONCLUSION

Based on the findings of this study, it could be concluded that educational system in public secondary schools in Ekiti State during Covid-19 was adequate based on students' involvement in learning process. It could also be concluded that students level of education during Covid-19 was high.

## Recommendations

- \*Teachers should be encouraged to utilize social media network for teaching to avoid students' idleness.
- \* Students should be more intimate with the use of social network for learning at available opportunity.

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