

THE IMPACT OF COVID-19 PANDEMIC ON SECONDARY SCHOOL EDUCATION: A CASE STUDY OF ILESA EAST LOCAL GOVERNMENT AREA OF OSUN STATE

By

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Abstract

This study investigates the impact of COVID-19 on secondary school education in Ilesa East Local Government Area of Osun. Simple random sampling technique was used in the selection of 5 secondary schools from the study area, out of which 20 respondents were randomly selected from each of the selected schools to give a total of 100 respondents. Questionnaire, which was the main instrument in the study was administered on the respondents, and data generated were subjected to descriptive and influential statistics. Chi-square was used to analyze the data gathered from the respondents at 4 degree of freedom with 0.05 level of significant. The findings revealed that the outbreak of COVID-19 has really affected the educational system in Ilesa East Local Government Area of Osun State, Nigeria, from the way students learn to the way teachers teach. There is a significant impact of COVID-19 on secondary school education in the study area, their mode of learning were adversely affected as a result of the pandemic, there is a significant relationship between online learning and the learning process in the COVID-19 pandemic period and that there is a significant relationship between online learning and the teaching process in the COVID-19 pandemic period. On this note, it is thereby recommended that government should create an enabling environment for both the students and their teachers in order to arose their willingness toward mobile learning, teachers should encourage the learners by creating an educational page in some of the social media such as Facebook, and the mass interactive forum such as telegram, zoom, etc; government needs to amend some of its policies regarding ICT usage in schools.

Key words: Impact; Secondary schools; Covid 19; Pandemic; Education

Introudction

The outbreak of COVID-19 forced all schools in Nigeria and all over the world to close down thereby substituting classroom teaching and learning with online teaching and learning. Moving all the existing courses online in a matter of days was an enormous task; the disruptive effect to learning was massive. As expected, a complete online course requires an elaborate lesson plan design, teaching materials such as audio and video contents, as well as technology support teams. However, due to the sudden emergence of the COVID-19, most schools were faced with challenges such as the absence of online teaching experience, early preparation, or support from educational technology teams. The coronavirus pandemic has revealed weak spots in every system it has tested, from government agencies to local school districts. Schools scrambled to provide student services and boot-strap distance-learning strategies. Answering this question is complicated by the unique circumstances of COVID-19. School closures added to the time that most students already spend at home during the summer months without explicit

face- to-face instruction from teachers. Against these back drops, it is very essential to investigate how coronavirus has grounded whole educational system in Osun State, Ilesa East Government as a case study.

Following the first-time identification of Coronavirus (Covid-19) in December 2019, the World Health Organization (WHO) declared that Covid-19 is a global pandemic in March 2020, and warned about its highly contagious nature (WHO, 2020). As a precaution to slow down its spread, countries all around the world followed strict protocols such as complete or partial lockdowns, social distancing regulations, and curfews. To reduce the chances of humans infecting each other with Covid-19, places where humans interact closely were shut down, including educational institutions. Accordingly, as an outcome of the measures taken worldwide, more than 1.5 billion enrolled students of all ages from all around the globe experienced interruption of education which equals nearly 90% of the global student population (UNESCO, 2020a; 2020b; UNICEF, 2020). The numbers of learners affected by Covid- 19 across African is shown in figure 1.

Though the interruption of education has occurred previously in many local instances (e.g., in cases of war, civil unrest, famine or strikes) it was, “being experienced more acutely and affectively by educators, students and parents” at a global scale for the first time (Oyeleke, 2020).

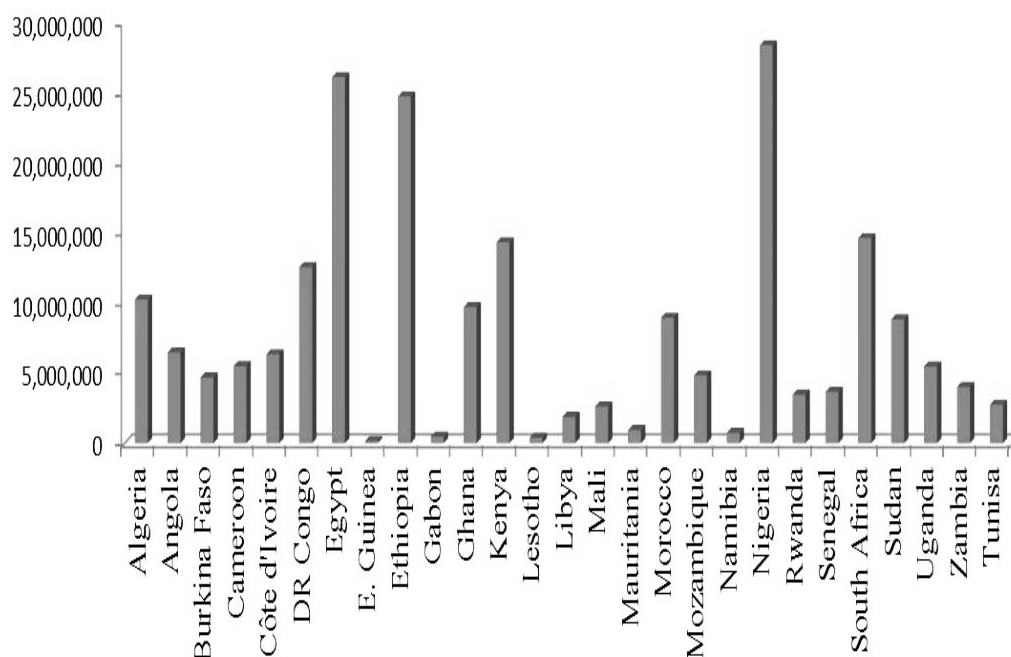


Fig.1 Number of learners Affected by COVID-19 across Africa

Source: World Health Organization (WHO, 2020).

Coronavirus disease (COVID-19) is a disease that is caused by Coronavirus disease (COVID-19) is a disease that is caused by a severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Diseases such as the severe acute respiratory syndrome (SARS) and the Middle East respiratory syndrome (MERS) reported in 2002 and 2012 respectively were caused by viruses similar to SARS-CoV-2. However, SARS-CoV-2 has a wider spectrum than the previously

reported similar viruses and therefore the difficulty in the treatment and management of COVID-19. Medical diagnoses and researches have shown that persons infected with COVID-19 can be symptomatic or asymptomatic in the early stages of infection depending on the individual's immune system. It is reported that symptoms of the disease include dry cough, fever, tiredness, shortness of breath, headache and general body weakness due to inducement of other ailments in the body (Zhong, et al., 2020). The novelty of SARS-CoV-2 and its genetic nature result to difficulty in treatment of COVID-19 and the development of preventive vaccines. The government of Nigeria implemented a strict country-wide lockdown in order to flatten the curve and consequently contain the spread of the Coronavirus. Fowler et al. (2020) reports that lockdown is effective in curbing the spread of COVID-19, but it has huge impact on the education, economy and social activities. Lockdown entails that businesses are closed and jobs are suspended (except those considered as essential services) and schools are also closed.

However, Viner et al. (2020) report that there is no currently available model or empirically-based report that shows positive correlation between closure of schools and curbing of the spread of COVID-19.

The first confirmed case in Nigeria was announced on 27 February 2020, when an Italian citizen in Lagos tested positive for the virus, caused by SARS-CoV-2. (Maclean, et. al, 2020). On 9 March 2020, a second case of the virus was reported in Ewekoro, Ogun State, and the victim being a Nigerian citizen who had contact with the Italian citizen. In March 2020, schools and educational institutions were immediately closed. Nigeria school system is one of the largest with about over 30 million students in secondary and higher secondary levels (Oyeleke, 2020). Now with such a large sector shut down and the students confined at their homes, it became imperative for schools to explore alternative methods of teaching and learning such as online learning. However, such a sudden shift from classroom-based conventional learning to online learning provided little or no time for teachers or learners to prepare themselves (Gesinde, 2020). According to Haruna (2020), the COVID-19 pandemic affected the educational systems worldwide, with Nigeria not excluded, leading to the near-total closures of Schools, Universities and Colleges. Most governments around the world have temporarily closed educational institutions in an attempt to curtail the spread of COVID-19. As of 7 June 2020, approximately 1.725 billion learners were currently affected due to school closures in response to the pandemic. The closure of schools, Colleges and Universities not only interrupts teaching for students; the closure also coincides with a key assessment period and many exams were postponed or cancelled (Odey, 2020). School closures impact not only students, teachers, and families but have far reaching economic and societal consequences. School closures in response to the pandemic have shed light on various social and economic issues, including student debt, digital learning, food insecurity, and homelessness, as well as access to childcare, health care, housing, internet, and disability services. The impact was more severe for disadvantaged children and their families, causing interrupted learning, compromised nutrition, childcare problems, and consequent economic cost to families who could not work (Haruna, 2020) Going to school is the best public policy tool available to raise skills. While school time can be fun and can raise social skills and social awareness, from an economic point of view the primary point of being in school is that it increases a child's ability. A relatively short time in school does this; or short period of missed school will have consequences for skill growth (Fowler et. al, 2020). Long periods of learning lost as the

closures lasted. Kekić *et al.* (2016) reports that schools losing long periods of learning due to disease outbreak can result to both temporal and permanent damage on educational system.

According to Otabor (2020), it is true that the crisis has provided an opportunity to all educational institutions to quickly improve and maximize their ICT operations. However, the majority of them do not have the capacity to fully deliver whole programmes online. It is the few schools in Nigeria that have that capacity, but their targets are mostly mature students. In response to school closures, UNESCO recommended the use of distance learning programs and open educational applications and platforms that schools and teachers can use to reach learners remotely and limit the disruption of education. With this sudden shift away from the classroom in many parts of the globe, some are wondering whether the adoption of online learning will continue to persist post-pandemic, and how such a shift would impact the worldwide education market (Asishana, 2020).

Objectives Of The Study

The main objective of this study was to investigate the impact of Corona virus pandemic on secondary school Education in Ilesa East Local Governments in Osun State.

The specific objectives were:

- To evaluate the impact of COVID-19 on secondary school education in Ilesa East Local Government Area of Osun State. To determine the effect of COVID-19 on student mode of learning in the study area.
- To find out the role of online learning on student's learning process during the pandemic in the study area.
- To investigate other alternatives learning during pandemic.

Also, the following hypotheses are considered in this study;

1. There is no significant relationship between Covid-19 and secondary school education
2. There is no significant relationship between Covid-19 pandemic and student mode of learning.
3. There is no significant effect of online learning and teaching process during the pandemic.

Research Methodology

This is a descriptive survey designed to obtain information on the impact of Covid-19 on secondary school in Ilesa East Local Government Area in Osun State, which contained information on the demographic data of the respondents of age, sex, class, religion etc., and other variables of interest was used as the main instrument for data gathering, thus, the target population for this study comprise all the secondary school in Ilesa East Local Government Area of Osun State. Simple random technique was employed to select five Secondary Schools, twenty respondents were randomly selected from each of the selected schools to give a sample size of one hundred respondents.

The questionnaire was administered on the respondents, and the information obtained were analyzed using the descriptive statistics of frequencies and percentage, while inferential statistics of chi-square was employed in the analysis of relationship at 0.5 level of significance. The modified Likert Scale was used and the weightings were Strongly Agree (SA) = 4, Agree (A) = 3, Disagree = 2, Strongly Disagree (SD) = 1. The average of these points is 2.50.

Descriptive data analysis (mean and decision using Chi-Square) were used to answer the research questions. A mean of 2.50 and above indicates agreement with the item statement while a mean of 2.49 and below indicates disagreement. For ease of analysis of the research in a question where the mean is 2.50 and above it will be regarded as positive impact while 2.49 and below was regarded as negative impact. The null hypothesis was tested with Chi-square, at $P < 0.05$.

$$\chi^2 \text{ Calculated figure or value} = \sum \frac{(o - e)^2}{e}$$

Where

O is for the observed frequency and

e is the expected frequency

DISCUSSION OF FINDINGS

Table 1
Demographic Information of Respondents

Sex	Frequency	Percentage (%)
Male	31	31
Female	69	69
Age		
13-15 Years	22	22
16-18 Years	10	10
18 And Above	68	68
Class		
Junior class	54	54%
Senior class	46	46%
Religion		
Christian	58	58%
Muslim	42	42%

Source: Field survey 2021.

Table 1 reveals the demographic information of respondents. This shows that 31% of the respondents were male, while 69% were female. The age distribution shows that majority (68%) of respondents are within the age range 18 years and above, 22% are within 13-15 years, while only 10% are within the age range 16-18 years, this implies that majority of the students are mature to know how the impact of Covid-19 has affected the school system.

Table 2
Impart of Covid-19 on Education

S/N	Items	SA	A	D	SD	Mean	Level of Acceptance
1	COVID-19 pandemic has resulted to total closure of schools	63	20	4	13	3.30	Accepted
2	Learners across the country are currently compelled to stay out of schools	30	56	7	7	3.05	Accepted
3	Long periods of learning have been lost for due to this closure of schools	23	46	20	11	2.81	Accepted
4	Disruption of curriculum which could take a long time to be recovered.	43	35	12	10	3.11	Accepted
5	Completely deny learners access to learning	47	36	12	5	3.25	Accepted

Source: Field Survey 2021

Table 2 reveals the effect of Covid-19 pandemic on secondary school education. Judging each items with the bench mark of 2.50, all the items have mean score above the bench mark, the score are 3.30 for the statement that Covid -19 pandemic has resulted to total closure of schools. The statement that learners across the country are currently compelled to stay out of schools is 3.05 this shows that $X^2 \text{ Cal} = 22.38$ is greater than $X^2 \text{ tab} = 9.488$ under degree of freedom of 4 and level of significant 0.05. Thus, the null hypothesis is rejected, which implies that there is significant relationship between Covid-19 pandemic and the education of secondary school students. This corroborate the view of Haruna (2020), who stated that COVID-19 pandemic affected the educational systems worldwide, with Nigeria not excluded.

In some homes radio /TV is monopolized and this is a real challenge, in a situation where there is only one TV in most families. And if the head of the family is not educated or has no interest of his/her children education at heart, he/she will deny the children the chance to be engaged academically and if there is a particular programme to be viewed on the TV. Likewise, traditionally some families believe that the use of the radio is the right of the parents, especially for listening to the news; thus, unless there is a deliberate advocacy and clear communication from governments for parents to permit their wards to use the radio, learning through the device will be impossible

Lack of Adequate supply, finance to purchase android phone and data to connect online. All these require money and majority of the people cannot afford it. Imaging state workers that are not well paid, and the price of goods is on the high side. How will such parent be able to support their children for online lesson?

Table 3**Chi-Square (X^2) Analysis of Relationship between Covid-19 Pandemic and Secondary School Education**

X^2 Calculated Value	Critic al Value	Degree of Freedom	Level of Significant
22.38	9.488	4	0.05

Table 3 reveal the relationship between Covid-19 pandemic and secondary school education in the study area. This shows there is significant relationship in the impart of Covid-19 pandemic and the secondary school education this is in line with Kekić *et al.* (2016) who reported that schools losing long periods of learning due to disease outbreak can result to both temporal and permanent damage on educational system.

Table 4**Chi-Square (X^2) Analysis of Relationship between Covid-19 Pandemic and Study Mode of Students**

X^2 Calculated Value	Critic al Value	Degree of Freedom	Level of Significant
22.07	9.488	4	0.05

Table 4 reveals the analysis of relationship between Covid -19 pandemic and secondary school education. This shows that $X^{2\text{ Cal}}$ (22.07) is greater than $X^2\text{ tab}$ (9.488) under degree of freedom (4) and significant level 0.05. Thus, the null hypothesis is rejected which implies that there is a significant relationship between Covid-19 pandemic and secondary school education.

Table 5**Chi-Square (X^2) Analysis of Relationship between Covid-19 Pandemic and Online Learning and Teaching Process.**

X^2 Calculated Value	Critical Value	Degree of Freedom	Level of Significant
21.80	9.48	4	0.05

Table 5 reveals the analysis of relationship between Covid-19 pandemic and online learning and teaching process. This shows that $X^2\text{ Cal}$ (21.80) is greater than $X^2\text{ tab}$ (9.488) under degree of freedom (4) and level of significant 0.05. Thus the null hypothesis is rejected which implies that there is significant relationship between Covid-19 pandemic and online learning and teaching process.

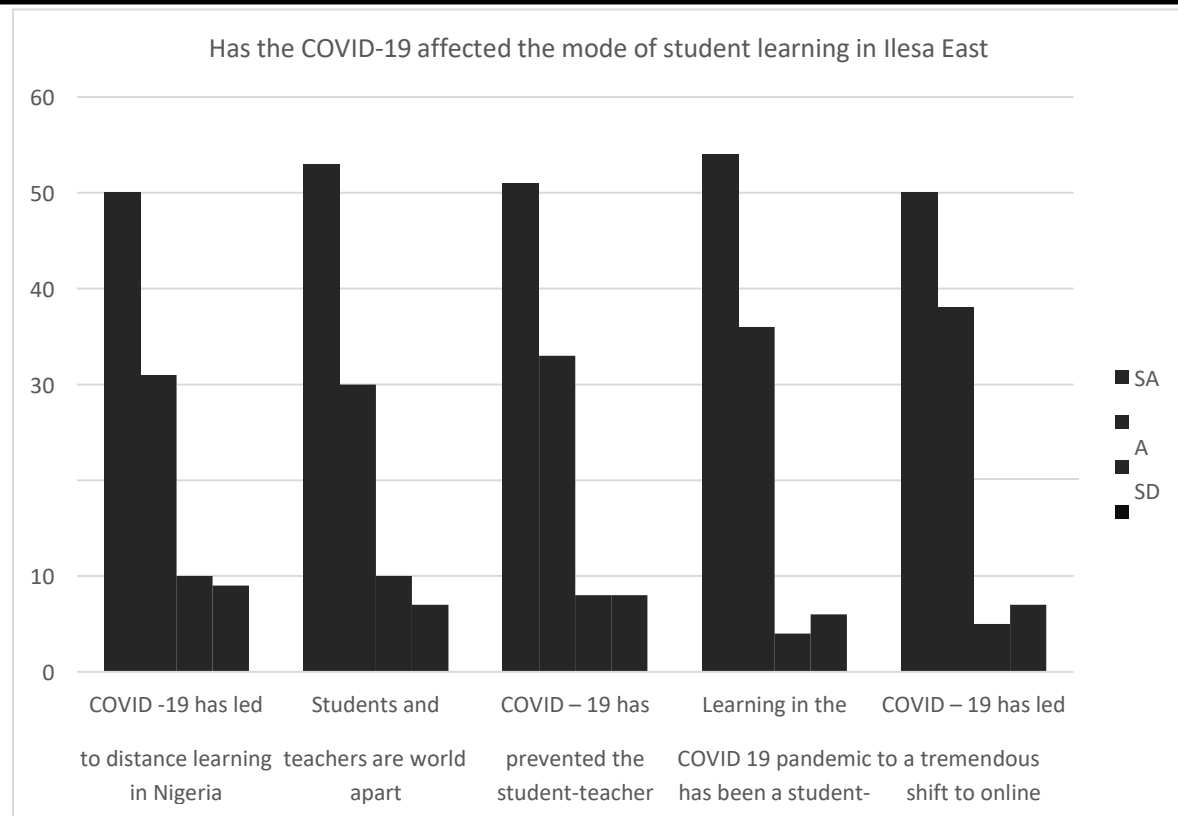


Figure 2: Chat analysis showing if COVID-19 has affected the mode of student learning

Conclusion and Recommendation

Use of technology in education has possible force to facilitate education from any location including remote areas and homes. Consequently, as the whole world is battle ready to contain and curtail Coronavirus pandemic or any other future occurrences, the use of digital or technology in education in any platforms would become the emergence of actuality for schools, teachers as well as students

Technologies in education should be seen as the mover of teaching and learning processes ahead in the face of the pandemic, as digital technologies drive the 21st century education system where educators are seen as facilitators, motivators and mentors of learners and not the sole owners of knowledge. Any government that jettison the idea to adopt and adapt to the rapid advancements in technology in education system will soon learn in hard ways as the world remains global village and the technology is the only key to globalization of knowledge.

It is therefore recommended that school leader should create a conducive environment for both the students and the staffs in order to arouse their willingness toward mobile learning. The teachers should encourage the learners by creating an educational page in some of the networking forums like Facebook. It is also suggested that mobile phones that have parental features to control students through limiting the phone functionality will be necessary. The government needs to amend some of its policies regarding ICT usage in secondary schools.

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