

NEGATIVE EFFECTS OF COVID-19 PANDEMIC ON EDUCATION, A CASE STUDY OF FEDERAL COLLEGE OF EDUCATION TECHNICAL ASABA

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Abstract

This study examined the negative effects of covid-19 pandemic on education in Nigeria. This study was guided by three research questions. The study employed descriptive survey design; questionnaires were applied in order to collect data. Data collected was analyzed using mean, standard deviation and Z-test. The respondents under the study were 331 students of FCE (T), Asaba. The study findings revealed that Covid-19 pandemic has significant impact on education in Nigeria; based on the findings from the study, schools need resources to rebuild the loss in learning during the pandemic.

Keywords: *Negative, Effect, Convid-19, Education and Pandemic.*

Introduction

COVID-19 Pandemic has affected higher education in Nigeria. The closure of schools meant that administrators of higher education had to come up with strategies to ensure that learning continues during the lockdown. Some Nigerian universities particularly the privately owned universities moved from traditional face-to-face teaching method to remote education. As the period of total lockdown extended, more universities quickly switched to online teaching. Both the teachers and students had to adapt swiftly to the new mode of education as they were trained virtually on how to use distance learning tools. Teachers and students faced challenges in adapting to online classes and maintaining the minimal communication to support learning and development (Adnan, 2020). Migrating to remote learning within a short period was difficult, especially in a developing country like Nigeria where advanced technology has not been well integrated into the educational system.

Consequently, it is very difficult; if not impossible, to estimate how much damage the Covid-19 pandemic has done to the school system all over the world. In March 12, 2020, the World Health Organization (WHO) officially declared COVID-19 also known as coronavirus a pandemic (WHO, (2020)). Due to this pandemic, educational institutions in most countries around the world were closed. Data from United Nations Educational, Scientific and Cultural Organization.(UNESCO) showed that the peak in closure of schools was at the beginning of April 2020, when about 1.6 billion students were affected across 194 countries (UNESCO (2020)). In March 2020, the Federal Ministry of Education in Nigeria directed the closure of all schools and they only began reopening in October, of the same year.

Management teams in these universities ensured that the quality of teaching was maintained and appropriate methods which address some of the limitations of remote teaching were used. Essays, presentations, reports, quizzes, assignments, etc. were

some of the coursework-related activities adopted, while most assessments were done via virtual multiple-choice questions and oral examinations.

Several institutions in Nigeria did not prepare for any contingency that may affect education such as COVID-19 pandemic lockdown; however, the management teams of some institutions were able to provide guidance and support to ensure that learning activities continued and students were assessed online (Anderson, 2019). This was mostly possible because school closure occurred in an era when technological innovations and digitalization in educational context are readily available. In this study, we explored the negative effects of covid 19 pandemic on education.

According to United Nations Educational, Scientific and Cultural Organization (UNESCO, 2020) almost 40 million learners have been affected by the nationwide school closure in Nigeria, of which over 91% are primary and secondary school learners.

Furthermore, Covid-19 has disrupted academic activities in Nigeria by limiting how students can access learning across the country for an already fragile education system; the Covid-19 pandemic poses unprecedented challenges on the government, students and parents that can explain to a great extent some of the dominant challenges in the system, (Thelma and Adedeji, 2020). As the nation begins to grapple with those challenges, a key question arises: Is the Nigeria educational system designed to adapt rapidly to the changing world?

Given the state of affairs in the world today, the nation's ability to ensure continuation of learning will depend largely on their ability to swiftly harness available technology, provide adequate infrastructure and mobilize stake holders to prepare alternative learning programs. Generally, Nigeria's education sector is not adapting, and is expected to struggle on that front for the fore-seeable future. (Thelma et al, 2020). However, the consequential socio- economic burden will be borne disproportionately by students in public schools as compared to those in private schools. While several private schools have begun to initiate distance learning programs and taking advantage of the myriad of ICT- learning opportunities provided by international community like China and America, Nigerian government limited by funds and persistent deficiencies in planning due to bureaucratic bottleneck is yet to announce any official plans for providing distance learning opportunities for learners except for few state governments like Delta State Government which started the Delta teaching on air first before other states like Lagos followed suit, there are indiscriminate changes in school programs some of these changes include postponement or outright cancellation of exams dates, changes in school time-tables, lack of aid or inability to effect academic activities with the help of online facilities etc. Umahi, (2020). The Covid-19 pandemic is first and foremost a health crisis; many countries have (rightly) decided to close Schools, Colleges and Universities. This crisis has kept the policy makers in Nigeria in the state of dilemma as they are faced with the closing of schools (reducing contact and saving lives) and keeping them open (allowing students and teachers to keep operating). The severe short- time disruption is felt by many families around the world. Teaching has gone online on an untested and unprecedented scale; student's assessments are done online with a lot of trial and error and uncertainty for everyone. (Anderson and Nielsen, 2019). Some parents have resorted to engaging their children in private classes (i.e. those who can afford it). It is obvious that this method is not only very expensive but also not all encompassing as it is not all subjects that were taught.

Statement of the Problem

Covid-19 pandemic affected virtually all facets of human existence in the world. Paramount amongst the major sectors affected in Nigeria is the educational sub-sector. This was because, the pandemic took the world by surprise, and hence no deliberate preparation was made for it. In Nigeria, schools, markets, parks, flights, transportation, even churches/mosques were lockdown for months. This act had very far reaching implications on the academic performance of the students all over among others. There were cases of delinquencies amongst youths and students which are yet to be determined. This was because virtually all students were out of school doing nothing. Very few schools that claimed to indulge in virtual learning but could not even boast of 30% to 50% success owing to obvious reasons. Hence it is the object of this study to look at the Negative Effects of Covid-19 pandemic on education, A case study of Federal college of Education Technical Asaba with a view to proffering reasonable proposals against such future occurrences.

Purpose of the Study

The main purpose of this study is to investigate the Negative effects of covid-19 Pandemic on education. This study tends to:

- ❖ To ascertain the negative effects of Covid-19 pandemic on academic activities of students of FCE (T) Asaba.
- ❖ To ascertain the consequences of these effects on educational achievement of students of FCE (T) Asaba.

- ❖ To identify various coping mechanism and solution that can be employed to guarantee improved academic activities and performance.

Significance of the Study

This study will provide an insight into the negative effects of covid-19 pandemic on academic activities and performance of student in Federal College of Education (Technical), Asaba the result of this study will be helpful to Government, Administrators, lecturers, students and parents to ascertain the level of damages caused as a result of the pandemic.

The findings of this study will help Government in the formulation and initiation of the best educational policy to be adopted to help get students back on track, by designing a new curriculum which should be able to deal with unforeseen circumstances like that of Covid-19.

Educational administrators through this study will acquire all the knowledge and skills necessary for effective management of schools using both human and material resources within their disposal to facilitate learning in their various schools by organizing orientation, workshop, conferences and symposium for both lecturers and learners, initiating ways of dealing with students welfare and irregularities especially in this time of Covid-19, and through the Information gotten from this study will help in the implementation and execution of policies made or formulated by policy Makers in enhancing and improving learning in schools, through this process; lecturers strategize on the best teaching methods to apply, and start introducing the use of I.C.T system of learning to enable students achieve desired results.

To the students; the findings of the study would provide students with clear knowledge on the effect the covid-19 pandemic had on their academic activities and performance, which the knowledge will encourage student to start keying into online method of learning, acquiring the knowledge needed to start handling modern technology which will help them to achieve their academic pursuit.

Finally the findings from this study will serve as reference materials to individuals or groups who may wish to embark on a similar research in future.

Scope of the Study

This study focused on finding out the negative effect of covid-19 pandemic on Education. A case study of Federal College of Education (Technical), Asaba, Delta State. The study is delimited to all the Biology Students (Degree and NCE) of the above mentioned school

Research Questions

This study intends to answer the following questions:

- What are the negative effects of Covid-19 pandemic on the academic activities of students of FCE(T) Asaba?
- What are the consequences of the effects on educational achievement of students of FCE(T) Asaba?
- What are the various coping mechanism and solution that can be employed to guarantee improved academic activities and performance?

Research Hypothesis

HO₁ There is no significant difference on the mean responses between male and female students on the Negative effects of Covid-19 on educational activities of students of FCE (Technical), Asaba.

METHODOLOGY

The following methods and procedures were used by the researcher to carry out the investigation of this study.

Research Design

The research design adopted for this study was survey research design. According to Okafor (2012), survey design aims at collecting information or data from members of the population in order to determine the current status of the population which respect to one or more variables.

Area of the Study

The study covers the Negative Effect of Covid-19 pandemic on education. A case study of Federal college of education technical Asaba, with the science student as the sample population. The above mentioned school is located in Asaba, Delta state.

Population of the Study

The population is made up of only degree year 1,2,4 (year 3 was exempted because they were not accessible as of then), and NCE year 1,2,3 Biology Education students, all in school of Science Education in Federal College of Education (Technical), Asaba. The total population of the study is 331 students. The population was gotten from the office of head of department Biology Education School of Science Education, FCE(T), Asaba.

Sample and Sampling Techniques

There was no sample or sampling technique adopted for the study since the whole population was used because it was small.

Instruments for Data Collection

The instrument for data collection was a structured questionnaire developed by the researcher. The instrument was titled "Negative effects of covid-19 pandemic on Education. A case study of Federal College of Education (Technical), Asaba." in Delta State. The instrument comprises of 28 items formulated from the three research questions guiding the study. The question consists of two parts, part A meant to elicit personal information, while part B focused on collecting data for answering the questions. The questionnaire was structured on a four-point rating scale namely:

Strongly Agree	-	SA
Agree	-	A
Disagree	-	D
Strongly Disagree	-	SD

Representing 4, 3, 2, and 1 grading points respectively.

Validation of the Instruments

The instrument for data collection was subjected to a thorough and careful examination by three experts. Two experts are in Biology Education while one expert is in measurement and evaluation from Federal College of Education (Technical), Asaba. These experts after critical examination of the instruments and corrections attested that the instrument has both face and content validity. Also corrections made were affected before the final copies were produced.

Method of Data Collection

The researcher administered the questionnaire to the respondents personally and collected them on the spot after they were answered.

Method of Data Analysis

Method of data analysis adopted was mean and standard deviation to analyze research questions and the information. Statistical tool of z-test was used to test the hypothesis of the study at 0.05 level of significance.

Presentation of Result and Analysis of Data

Presentation of result and analysis of data obtained from the questionnaire. It shows the respondents opinion on the effect of covid-19 pandemic on the academic activities and performance of students.

The summaries of the responses of the items on the questionnaire and its analyses are shown in the table below.

Research Question 1: How has covid-19 pandemic affected the academic performance of students of Federal College of Education (Technical), Asaba?

Table 1: Mean Responses of the Respondents on How covid-19 pandemic affected the academic activities of students of Federal College of Education (Technical),Asaba?

S/N	Items	MALE				FEMALE			REMARK	
		SA	A	D	SD	N	X	SD		
1	Lack of physical classes.	261	50	20	20	331	3.72	0.18	Accepted	
2.	Lack of motivation among the students.	270	50	11	11	331	3.78	0.19	Accepted	
3.	Anxiety and depression on the part of the students.	200	70	30	30	331	3.36	0.16	Accepted	
4.	Academic interest reduced drastically.	250	40	20	21	331	3.93	0.19	Accepted	
5.	Poor teacher-student relationship.	281	50	0	0	331	3.69	0.18	Accepted	
6.	Limited time were allotted for lectures and examinations.	292	39	0	0	331	3.88	0.19	Accepted	
7.	Most lectures were not able to cover their minimum standards.	246	40	20	25	331	3.53	0.16	Accepted	
8	Curiosity on the part of the students to learn more at home.	30	31	70	200		1.66	0.15	Rejected	
Grand Mean							3.45			

Table 1 above shows that the respondent agreed to seven (7) items under the research question 1 with the mean scores of 3.72, 3.78, 3.36, 3.93, 3.69, 3.88 & 3.53, recorded respectively while item 8 which states that there was curiosity on the part of the students to learn more at home was rejected with the mean score of 1.68 which was below 2.50 cutoff. All the question which were above the cutoff point were accepted as how covid-19 pandemic affected the academic activities of students of Federal College of Education (Technical), Asaba. The grand mean of 3.45 is positive which showed that covid-19 pandemic affected the academic activities of students of Federal College of Education (Technical), Asaba Negative.

Research Question Two: What are the consequences of the effect on educational achievement of students of Federal College of Education (Technical), Asaba.

Table 2: Mean Responses of the Respondents on the consequences of the effect on educational achievement of students of Federal College of Education (Technical), Asaba.

S/N	Items	N	SA	A	D	SD	X	SD	REMARK
9.	It brought about Social isolation.	331	300	31	0	0	3.90	0.35	Accepted
10.	Instability of institution to use visual learning platform.	331	225	70	30	6	3.55	0.16	Accepted
11.	Unable to adsorb all knowledge and skills via online.	331	220	85	20	6	3.56	0.16	Accepted
12.	Effect on school calendar.	331	245	70	16	0	3.69	0.17	Accepted
13.	It became a major problem for slow learners	331	250	60	21	0	3.69	0.17	Accepted
14.	Interruption of student's activities.	331	299	30	2	0	3.89	0.19	Accepted

15.	Production of half-baked students.	331	225	86	18	2	3.61	0.17	Accepted
16.	Deprived students the practical experiences of the laboratory		289	40	2	0	3.86	0.19	Accepted
17.	It led to incomplete implementation of the school curriculum	331	292	39	0	0	3.88	0.19	Accepted
18.	Lecturers were able to assess the students' performance better through online study	331	30	20	21	260	1.45	0.16	Rejected
19.	It creates room for forgetfulness among students	331	298	30	3	0	3.87	0.19	Accepted
Grand mean							3.54		

Table 2 above shows that the respondents agreed to ten items under the research question, which are item 10,11,12,13,14,15_16,17,19,and 20 with the mean scores of 3.90, 3.55, 3.56, 3.69, 3.69, 3.89, 3.61, 3.68, 3.88 and 3.87 respectively which were above the cutoff point of 2.50 and were accepted as the consequences of the effect on educational achievement of students of Federal College of Education (Technical), Asaba. While item 18 which states that lectures we're able to assess the students' performance better through online study with the mean score of 1.45 below 2.50 was rejected. The grand mean of 3.54 is positive which shows the consequences of the effect on educational achievement of students of Federal College of Education (Technical), Asaba.

Research Question Three:

What are the coping mechanism and solutions that has to be employed to guarantee improved academic activities and performance?

Table 3: Mean Responses of the Respondents on the coping mechanism and solution that has to be employed to guarantee improved academic activities and performance

S/N	Items	N	SA	A	D	SD	X	SD	REMARK
20.	Students should have access to digital resources.	331	276	35	15	0	3.75	0.18	Accepted
21.	School calendar should be favorable post pandemic.	331	282	40	9	0	3.82	0.19	Accepted
22.	Institution should have virtual learning platform as to cover academic lapses.	331	292	30	9	0	3.85	0.19	Accepted
23.	More funds should be allocated to the educational sector.	331	302	29	0	0	3.91	0.20	Accepted
24.	Student's welfare should be paramount to curtail depression and anxiety.	331	311	19	1	0	3.93	0.19	Accepted
25.	Conduction of seminar and sensitization programmers	331	321	10	0	0	3.96	0.20	Accepted

in schools for student to recover.

26.	Relationship between students and teachers should be improved.	331	300	30	1	0	3.90	0.19	Accepted
27	Improved technology for students practical	331	311	18	2	0	3.92	0.19	Accepted
28	Workshop on technology should be made available for both students and lecturers	331	323	8	0	0	3.97	0.20	Accepted
Grandmean							3.89		

The table above shows that items 20,21,22,23,24,25,26,27 and 28 with mean score of 3.75,3.82,3.85,3.91,3.93,3.96,3.90,3.92 and 3.97, respectively were above the cutoff point of 2.50 and were accepted as the coping mechanism and solution that can be employed to guarantee improved academic activities and performance. The grand mean of 3.89 showed that the coping mechanism and solution that has to be employed to guarantee improved academic activities and performance were adequate.

Result of Test for Hypothesis 1

HO: There is no significant difference on the mean responses between male and female students on the negative effects of Covid-19 on educational activities of students of FCE(T) Asaba.

Table 4: Result of the z-test difference between the mean responses of male and female students on the effects of Covid-19 on educational Activities of students of FCE (T) Asaba.

Categories	N	X	SD	Z.CAL	Standard error	Z.CRI	Decision
Male	64	3.135	1.1225	-2.53	0.155	1.96	Null Hypothesis accepted
Female	267	3.484	0.6145				

Summary of Major Findings

The following are the major findings of the study.

The pandemic caused poor teacher-student relationship. Due to the covid-19 pandemic most lecturers were not able to cover their minimum standard. There is an effect on school calendar which is a consequence caused by covid-19 lockdown. There is instability of institution to use visual learning platform which has effect on the educational achievement of students. The pandemic lead to so interruption of Students activities. When Academic activities resumed, limited time we're allotted for lectures and examination. Lack of physical classes which led to social isolation among students and lecturers. The pandemic deprived students the practical experiences of the laboratory. More funds should be allocated to the educational sector. There should be improved technology for students practical. Students should have access to digital resources it a solution given to guarantee improve academic activities and performance. The School calendar needs to be favorable post lockdown.

Lastly Relationship between students and teachers needs to be improved to help students cope.

The null hypothesis stated that there is no significant difference on the mean responses between male and female students on the negative effects of Covid-19 on educational activities of students of FCE (T) Asaba, it is thereby accepted.

Discussions

The novel COVID-19 disease identified in Wuhan city, China in December 2019 spread rapidly not only in China, but also worldwide. Therefore, governments around the world were either temporarily closed or implemented localized closures of educational institutions affecting over 60% of student population worldwide. About 155 countries worldwide have introduced various tools and learning platforms as a solution to continue the education process during the pandemic. Many universities in Nigeria minimized gatherings through suspending or canceling all campus activities including suspension of classroom teaching to decrease the rapid spread of the virus. Consequently, some colleges and universities switched to the online teaching for undergraduates to minimize either the contact either between the students and lecturers or between students. In this section, the researcher discusses the findings of the result after analyzing the data on the effect of covid-19 lockdown on the academic activities and performance of students.

The first research question sought how covid-19 pandemic has affected the academic activities of students of Federal College of Education (Technical), Asaba. Result indicate that there was no much educational practices and instructional delivery system practiced during Covid-19 Pandemic. This finding is corroborated by Winthrop (2020) who opined that whether by online learning or remote learning, that the current educational practices are lacking, though the emphasis on continued learning is vital, it is equally important to provide information on how schools can actively participate in the online teaching and learning. The only educational practice and instructional delivery system practiced during the lockdown were WhatsApp through the use of Android phones while videos, audios and written texts are exchanged and use of recorded video to be viewed using computer or laptop. This was in line with Pravat (2020) who opined that educational practices used during the covid-19 pandemic include providing work to the students through the use of internet. Bello (2008) also reported that during strike action, Universities curriculum were not fully implemented as a result of strike action, students struggle to acquire certificate at all cost without actually fulfilling the required educational objectives which is applicable to the lockdown situation

The second research question sought to ascertain the consequences of the effect on educational achievement of students, Oladipo (2012) stated that keeping students' way from school due to outbreaks like strike and lockdown would result in the academic calendar being compressed and parts of the curriculum skipped, some topics would not be treated and the students would have to write the exams like that, thereby resulting in poor performance and decline in quality of education. Bello (2008) also reported that during strike action (outbreaks), Universities curriculum were not fully implemented as a result of these action, students struggle to acquire certificate at all cost without actually fulfilling the required educational objectives. The findings of the study show that the problems that hindered the quality of educational practices and instructional delivery system include; most of the lecturers were not prepared for online teaching, problem of internet connectivity, some of the students do not have access to Android phones, insufficient power supply, problem of getting required equipment for online teaching and learning and majority of the students couldn't afford the money to buy airtime for data subscription. This is in line with Ministry of Health and Family Welfare (MOHFW 2020) who opined that downloading of study materials of large size from the internet pose a serious drawback for the students. Also, Rieley (2020) opined that as the colleges were closed, the libraries both central as well as departmental were also closed hence many college students that rely on books and articles that are available in their college libraries as the source of study materials were not having those library access facilities.

The last Research question suggests the various coping mechanism and solution that has to be employed to guarantee improved academic activities and performance which includes ; information and communication technology such as Android phone, laptops should be made available and accessible, data subscription and WIFI network should be made free, schools and colleges should provide online digital library, there should be steady power supply in the country, workshops and conferences should be organized for teachers, and this corroborate with Fatma (2020) who opined that telecommunication system should be upgraded with special emphasis on the internet connectivity. Also, Tarker and Preeti (2020) opined that teachers should be trained to assist students in their problem beyond the traditional limits of the classroom.

Implications of the Study

The implications of these findings are;

Since there was no much educational practices and instructional delivery system practiced during Covid-19 pandemic in FCE(T) Asaba, the educational performance of the students was affected negatively, it led to a delayed academic session and some syllabus were skipped and some not covered as they should have been. Even other social activities of the school were declined and not practiced as a result of the pandemic.

Owing to the fact that the quality of educational practices and instructional delivery system practiced during the COVID-19 pandemic were poor, the academic performance of the students was poor as well, because students can only give out what they have been thought, hence it is the opinion of the study that all the coping strategies suggested should be implemented hence the performances of our students will keep on dwindling.

Recommendations

Based on the research of the findings, the following recommendation were made.

The school management should provide online digital library where students and lectures can access information needed for educational research and teaching and learning.

Create virtual Homeroom Tables: Set up discussion threads with some students in order to facilitate conversation about assignment and class material. This will allow students to have more peer interaction during their time at home and still maintain the relationship with their teacher.

The universities should have internet connectivity and grant free access to their usage by both the lecturers and the students. This will offer a good opportunity in interconnecting all the students and lecturers for virtual classrooms' learning.

Using remote learning and Education resource to mitigate loss of learning, distance learning as a means of mitigating for lost time in school.

Workshops and conferences should be organized for lecturers and students on online teaching and learning to enable them to know more about the use of Skype, YouTube, Google meet and zoom for teaching and learning.

Government should provide information and communication technology infrastructure such as Android phones, laptops, computer for the schools and make them to be easily accessible by the students and lecturers.

Data subscription and WIFI network should be made free, available and easily accessible to the students and lecturers in order to help them have access to download documents and files online for teaching and learning.

The Nigerian federal and state universities should as a matter of urgency provide adequate and dependable virtual learning environment, application softwares and the necessary technological tools including effective time schedules for students learning.

The Nigerian government should donate more funds for the provision of more digital facilities needed for effective operation and for the overall improvement of the areas that need amendment.

Limitation of the Study

The limitations of the study is the short period of time apportioned for the research work because it was combined with some other school activities. Books available for writing the literature review of the study are limited and it posed a great challenge to the researcher. Finance also posed a major constraint to the researcher in carrying out the research work. The attitude of some of the respondents given the questionnaire to fill for data analysis was also not encouraging at all, however, the research manages to surmount all the challenges to the extent that it did not affect the study.

Suggestion for Further Study

Further studies can be carried out using the following topics

Impact of Covid-19 pandemic on academic performance of students in colleges of education in federal institutions in Delta state.

Problems that hindered the effective use of instructional delivery system during the covid-19 lockdown in Impact of covid-19 on the Nigerian educational system: strength and challenges of online/ virtual Education in federal university in Delta state

Conclusion

The COVID-19 pandemic has affected and will continue to affect the delivery of knowledge and skills at all levels of education. Although many children and adult learners will likely compensate for this interruption of traditional educational services and adapt to new modalities, some will struggle. The widening of the gap for those whose families cannot absorb the teaching and supervision of education required for in-home education because they lack the time and skills necessary are not

addressed currently. Based on the research findings, it was discovered that there are certain problems that hindered the quality of educational practices and instructional delivery system during Covid-19 pandemic which among them include; problem of internet connectivity, insufficient power supply, lack of availability of online materials for study, etc. and those problems encountered are not beyond the control of the Government. The researcher believed that the solutions to the problems can lead to better and greater attainment of educational objectives and enhance effectiveness and efficiency in teaching and learning during a pandemic. Workshops, seminar and conferences should be organized regularly for the lecturers in order to enlighten them on online teaching in case of a repeat of a pandemic in the near future.

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