THE EFFECT OF COVID – 19 ON ACADEMIC ACHIEVEMENT OF SENIOR SECONDARY SCHOOL STUDENTS IN THE RURAL AREA OF AKWA IBOM STATE

[1]ETUKUDO, Udobia Elijah Ph.D & [2]NWOKOCHA, Azubike Cyprain Ph.D

[1] Department of Mathematics ,School of Secondary education (Sciences)
[2] Department of Educational Foundation , School of Education,
Federal College of Education (Tech.), Omoku, Rivers State, Nigeria
Corresponding Email **:** udobiaetukudo@gmail.com

Abstract
The effect of COVID – 19 pandemics pandemic on the academic achievement of senior secondary school students in the rural communities of Akwa ibom state of Nigeria was studied. Five hundred (500) students were randomly selected from 2057 Senior Secondary School Class Two (SSC2) students. The academic scores of the students in Mathematics and English Language were collected from the terminal examination result broad sheets. Two hypotheses guided the study . Using causal comparative (ex- post facto) design, the analysis of data revealed that there existed significant differences in academic achievement of the students before and after the COVID – 19 pandemics. Students' achievement decline after COVID -19, due to the negative effect of the pandemic on learning and education in general. Students need palliatives and motivations to recover from shock cause by the COVID – 19.

Keywords: *Academic Achievement , COVID – 19, Effect, Pandemic, Palliative, Student*

Introduction
The advent of COVID -19 resulted in special distancing, leading to closure of schools during lock down and other measures that were used to ensure safety while learning. This phenomenon did not go down well with learners and teachers alike. Learning gaps were created doing the pandemic which led to disruptions (common wealth, 2022) that resulted in drop in enrolment and marginalization, especially for girl children. Gonzalez et al., (2020) carried out a study with 458 students from universided Autonoma de madrid in Spain and discovered that there was a significant positive effect of COVID–19 on students' performance. In their finding they unveiled that students studied harder during the lock down which resulted in higher achievement. Chertoff et al., (2020) decried the adverse effect of COVID - 19 on the education of trainees in radiology, admitting that social distancing lead to drop in patients volumes resulting in virtual lesson, causing disruption and shift in the mode of examination. Donmelly et al., (2021) complained that COVID-19 caused disruption in learning in Europe and measures adopted to support learning failed to yield desired effect. eLearning Africa and Edtech Hub (2020) equally confirmed that COVID – 19 pandemic caused serious adverse effect on education which could not be mitigated. Human Right Watch (2020) pinpointed that COVID -19 pandemic resulted in inadequate and complete lack of education for children in rural communities in Africa, while Burges and Sievestsen (2020) advanced that there was serious negative of COVID–19 pandemic which lead to extended years of graduation for students thereby prolonging their period of graduation. In Nigeria the story was not different. The negative effect of COVID -19 could not even be remediated by introduction of e – learning (Eze et al., 2021).

The variance in academic achievement of students in secondary schools in the rural communities due to COVID–19 is not clear but finding reveals that the pandemic had serious negative impact on learning worldwide.

This study is conducted to determine the effect of the COVID–19 pandemic on academic achievement of secondary school students in the rural communities in Akwa Ibom Stated of Nigeria.

Statement of the problem

The wave of the pandemic that hit the world in 2019 led to closure of schools and restriction in movement. There was no direct teacher to student class lesson for of not less than three months. During the period there were series of interventionist strategies that were introduced, including radio programme for primary and secondary schools students. In some advanced countries zoom was introduces to promote learning. These strategies utilized during the lockdown were not accessible to school children in remote area where radio signals and internet facilities were poor. Even when the schools resumed, there was social distancing and wearing of face mask which hinder interaction.This raises doubt on the effectiveness of learning; it became pertinent to examine the effect of the pandemic and associated hindrances on achievement of students in secondary schools in the rural areas. If any different exist between the achievement student before the pandemic and associated lockdown and after, when school resumed, is the focus of this study.

Hypotheses

H_{01} : There is no significant difference in the achievement of Senior Secondary school students in Mathematics before and after the COVID – 19 pandemics.

H_{02} : There is no significant difference in the achievement of Secondary School students in English Language before and after the COVID – 19 pandemics.

Purpose of the study

The purpose of the study is to determine the effect COVID-19 on the achievement of student in the basic compulsory subjects, mathematics and English language. It also determines whether the various strategies used to mitigate the effect of the lockdown on learning was successfully in the rural communities.

Significance of the study

The study reveals the impact created by the various measures taken by the government to ensure that school children learned notwithstanding the COVID–19 pandemic and its associated problems - such as lockdown, social distancing and wearing of face mask. It shows the different in achievement of students before and after the COVID–19 pandemic thereby giving indication on the need for superior strategy for learning during emergencies like the pandemic.

Research design

The research is a causal comparative or ex – post facto study. It collected already existing data and analyzed to draw inference and conclusion.

Samples and sampling techniques

A total of 500 senior secondary two (SS2) were used for the study. The subjects were randomly sample from a total of 2057 students in SS 2 in 10 secondary schools in rural communities, purposively sample from public secondary school in Eket senatorial district of Akwa Ibom state, which was randomly selected from the three senatorial district of the State.

Instrumentation and data collection
The instrument for the collection of data for the study was terminal examination result sheets. The broad sheets for the first term results of the 2019/ 2020 session   which was in December 2019 and the broad sheet of third term result which examination was taken in September 2020 after the lockdown were used to collect the data. The scores of the 500 hundred students in mathematics, English and Language (the two compulsory subjects at this level of education) were randomly sampled and used for data analysis.

Data analysis procedure
The data were analysis using by calculating the mean and standard deviation of the scores which were used to test the hypotheses. All the hypotheses were tested at 0.05 level of significance using t – test (t – ratio).

Results
Hypothesis H_{01}
There is no significant difference in the achievement of senior secondary school students in mathematics before and after the COVID – 19 pandemics.
The result is shown in table 1 below:

Table 1: t – ratio analysis of scores of students in Mathematics before and after the COVID - 19 Pandemics

Term	Mean score	Standard Deviation	N	Degree of Freedom	t - ratio	Critical Value	Decision
Before the COVID – 19 Pandemic	63.2	9.1	500	498	32.8	1.96	Reject H_{01}
After the COVID – 19 Pandemic	41.7	11.8	500	498			

Considering mean score of 63. 2 and standard deviation of 9. 2 before the pandemics, as against means score of 41. 7 with standard deviation of 11. 8 after the pandemics, which gives a t – ratio of 32. 8, greater than the critical value of 1. 96, the null hypothesis H_{01} is rejected. There is a significance difference in the achievement of students before and after the pandemic.
Students' achievements were higher before the pandemic than after the pandemic.

Hypothesis H_{02}
There is no significant difference in the achievement of Senior Secondary School students in   English Language before and after the pandemic.

Table 2: t – ratio analysis of scores of students in English Language before and after the COVID - 19 Pandemics

Term	Mean score	Standard Deviation	N	Degree of Freedom	t - ratio	Critical Value	Decision
Before the COVID – 19 Pandemic	68	7.3	500	498	18.5	1.96	Reject H_{02}
After the COVID – 19 Pandemic	47.4	8.1	500	498			

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With mean score of 68 and standard deviation of 7. 3 before the pandemic as against mean score of 47. 4 and standard deviation of 8.1 after the pandemic, it is clear that there was a significant different in achievement in favour of the period before the pandemic, t = 18.5 which is greater than 1. 96 the criterion value of t- ratio at 0.05 levels of significance shows that the difference was significance, hence the rejection of the null hypothesis H_{02}.

Discussion of findings

The result of the testing of the three hypotheses indicates that there existed significant differences in the achievement of senior secondary school students before and after the COVID – 19   pandemics, students' achievement in Mathematics and English language declined after the COVID – 19 pandemics. The result of the first term examination, which was the last term before the out breaks were significantly higher in the two subjects. The second term took place during the COVID – 19 pandemics and it was obvious that the students could not do well   because it was crashed. The third term which was in September, 2020, in Akwa Ibom State, was the first term after the pandemics. The achievement scores of the students were   reasonably lower than the first term showing that the students did not recover   from the pandemic. The COVID – 19 pandemics had serious impact in the achievement of the learners who did not recover even after one term. There is need to provide incentives as well as remedial measures like after school and weekend
lessons to help students cope with the effect of the lock down an learning. Government should introduce new books that would simplify the subject matter and make learning easy as well as   others motivational strategies like introduction of palliatives such as free books, pens, mathematical sets, pencils and wears like polo shirts with inscriptions "good bye to COVID – 19 pandemics" to induce the leaner and help them forget the harsh condition they went through during the pandemic was not friendly to learning and schooling.

The   findings of the study however, agrees with Commonwealth (2002), Chertoff, Zarzour and Harvey (2020), Donmelly, Patrinos and Gresham (2021) as well as Eze et al., (2021)who decried the negative effect of COVID – 19 on learning and school Programmes. The findings differ strongly from that of Gonzelez et al., (2020) which asserted that COVID – 19 had significant positive effect on the learners after university level, pinpointing that the students use the lockdown to study harder resulting in higher achievement. This may be one out of hundreds but could not be true for many situations due to fear of infections or losing family member to the pandemic as well as other distractions. Nevertheless, human right watch (2020), E – learning Africa and EdTech Hub (2020) as well as Barges and Sievestsen (2020) still confirm that COVID – 19 had negative effect on learning. They asserted that this was cause by lockdown and suggested that steps should be taken to mitigate the ugly effect on learners.

Conclusion

The study revealed that COVID – 19 pandemics hard serious negative effect on learning and achievement of students at the Senior Secondary School level in the rural communities in   Akwa Ibom State. It is discovered that there exist significant differences in the achievement of learners in Mathematics and English Language which are the compulsory subjects. The achievement of students in the subjects declined after the COVID – 19, leading to lower achievement score than before the pandemic. It is therefore essential to introduce palliative and other form motivation to enable learner recover from the shock created by the COVID – 19 pandemics that negatively affect their performance.

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