

Innovations

Covid -19 Pandemic and Impact on Teaching and Learning of Technical College Students in Ekiti State, Nigeria

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Abstract: *The study examined the covid-19 pandemic and impact on teaching and learning of technical college students in Ekiti State, Nigeria. The population was (3,425) for 2018/19 academic session. The descriptive research of the survey design was employed. Validated instrument of covid-19 pandemic and impact on teaching and learning of technical college students questionnaire (CPITLTCQ) was employed to gather the necessary data. The research instrument was validated using face and content validity. The questionnaire contains 15 items in the 4-point worth scale and information about respondents. The questionnaire were properly filled and coded into SPSS. Cronbach alpha was used to obtain 0.64 reliability coefficient showing that the instrument was stable. Mean and standard deviation was used to analyze the data collected for the study. Based on the findings, it was recommended among others, that Government and other relevant educational bodies and stakeholders should provide stable electricity, quality and standard internet connection. Training and seminars should be organized for the teachers to be updated, remote learning challenges should be looked into so that technical education can be improved in Ekiti State.*

Keywords: *Covid-19 Pandemic, Impart, Teaching and Learning, Technical College, Nigeria.*

I. Introduction

Coronavirus that is also called COVID-19 was a disease that spread across the globe. This is a disease that spread among the people. It is affected disease. Coronavirus otherwise known as covid-19 affected nearly all economic activities across the globe. The academic education was seriously affected across the globe. The Vocational and Technical Education which mostly deals with practical courses stand still during this period.

In Technical Education, there are two languages that are understood, they are drawing and practical. Drawing is the language of technical education and this language is used to communicate among the teachers to the students and students use it to communicate to other students. Covid-19 has deprived this among students and teachers during the Covi-19. Some of the teachers and lecturers that went online to teach find it difficult to teach vocational and technical courses online, because most of the courses deal with practicals which are using consumeable materials to carry out the practicals work. During practicals work students need to move closer to one another, so there is no way the disease will not affect others if it happens the school was on.

The Coronavirus otherwise known as Covid-19 affected nearly all the people that got contact with any patient with the disease. The disease spread fast. It is highly transmitted and pathogenic viral infection caused by severe acute respiratory syndrome [Shereen 2020]. According to Shereen, people contact the illness when a liquid particles from the infected carrier spread out to another person. This is a disease that global had not experience before and it moves fast and spread continuously in the year 2019. Abebe [2020] describe Covid-19 as an illness caused by a novel Coronavirus now called severe acute respiratory syndrome. This disease quickly affect human cells and quickly have impact on health. The World Health Organization WHO [2020] stated that Covid-19 is an infectious disease caused by the Sars-Cov-2 Virus. This is the believe of WHO. According to the organization, people contact the disease when getting closer to the infected carrier through the liquid particle spreading from coughing, sneezing, speaking, singing or breathing.

In technical college, most of the time students remain in the workshop, working on practicals. This practical work involved using tools and other consumeable materials. There is no way the students will not touch one another or the tools a student used other students will not use it. So it was very difficult to manage academic during this period, because many business was stand still which paralyzed so many things. So many businesses were affected, economy was affected, companies and industries were closed down. The virus was discovered in China City of Wuhan in December 2019.

The effort to reduce or control the spread were failed and unsuccessful as the virus fast spread out to other areas of Asia, Africa, America and later worldwide. At this period, no education can take place, two to three people cannot stand together. The era of Covid-19 pandemics discourages togetherness among the people. This era brings changes to the teaching in education system. These changes were made very quickly as the prevailing circumstances demanded for it. Almost overnight, many schools and education system began to offer education remotely [Kamanetz 2020; Sun et.al. 2020]. System of teaching and learning turns immediately to so many ways such as through: television and radio, the internet, the postal offices, schools shifted

to teach students in very different ways. It is clear and generally accepted that “this crisis has stimulated innovation within the education sector” [United Nation 2020].

The changes or innovation that occurred in the immediate days and few weeks during the period of Covid-19 struck are not necessarily the change education system needs to make changes in the world. The changes were more about addressing the immediate and urgent need of

continuing schooling, teaching online, and finding creative ways to reach students at home rather than using this opportunity to rethink education in technical colleges in Ekiti State.

In technical colleges, there are different units like; Building technology, Carpentry technology, Automobile technology, Mechanical technology, Electrical technology, among others. Each unit or department teaches students according to the approval standardized curriculum which allows all graduates to proceed in their career in any other higher institution both within and outside the country.

Academic performances of the students in technical colleges are part of the tools for assessing the well being of both students and the institution. Facilities must be provided for practical works. Government must provide enough money for the institution. Academic performance is the knowledge gained which is accessed by the score of the students. When nothing stops the students, the academic performance of the students are positively skewed, this gives a high rate to the performing capabilities of the teachers teaching. Brew(2021), stated that academic performance is affected by many factors including parents, teachers, condition of the schools, social amenities, other factor like Covid-19 and others.

Stagnation of Development in Technical Colleges Curriculum:

Coronavirus also known as Covid-19 which was a worldwide known disease had effect on technical college academic sessions in Ekiti State in 2019. Covid-19 pandemic brought unprecedented educational disruption with several students and youths across the planet. This also affected technical college in Ekiti State which made all academic sessions stagnant in the colleges in Ekiti State. Nigeria, this led to adopting the online teaching and learning method which led to challenges, opportunities and constraints to online teaching and learning process.

Covid-19 Impact on Technical Colleges in Ekiti State:

From the study of analysis, it shows that Covid-19 impact on the technical colleges in Ekiti State has led to poor performance of the students in the year 2019/2020. There were death of some students, staffs and some were also admitted into the Hospitals due to the health challenges. Students were restrained of social amenities and were ordered to stay at home.

Purpose of the Study:

The main purpose of this study is to assess the impact of Covid-19 on teaching and learning in technical colleges in Ekiti State, Nigeria.

The Purpose of the Study are as Follows:

1. To identify the constraint of Covid-19 on online teaching and learning in technical colleges in Ekiti State.
2. To identify ways to address the Covid-19 challenges faced by technical college students and teachers in Ekiti State, Nigeria.
3. To identify the benefits the pandemic has brought to technical colleges in Ekiti State, Nigeria.

Research Questions:

The following questions were raised to guide the study:

1. What are the constraints of Covid-19 on students online teaching and learning in technical colleges in Ekiti State, Nigeria.
2. What are the Covid-19 challenges faced by technical college students and teachers in Ekiti State, Nigeria.
3. What are the benefits that pandemic has brought to technical colleges in Ekiti State, Nigeria.

II. Methodology

The study adopted descriptive survey design due to the fact that it will enable the information to be obtained for the study from a representative sample of a target population which is impossible to guarantee randomness in composition. Critical consideration of design and each variable involved in the study must be considered without manipulation. The population was (3,425) for 2018/2019 academic session. The sample of the study comprises (150) students, randomly selected from three technical colleges in Ekiti State. Simple random sampling techniques in selecting fifty (50) students each from the selected schools. The research instrument used for the study was a questionnaire of Covid-19 pandemic and Impact on Teaching and Learning of Technical College Students Questionnaire.(CPITLTCQ). The instrument faces validation by three lecturers in the technical colleges in Ekiti State. The questionnaire contains 15 items with 4-point likert scale and information about respondents. The instrument was subjected to a reliability test. A pilot study was conducted in college outside those of the sample where ten (10) questionnaires were administered. Thereafter cronbach alpha was used to obtain 0.64 reliability coefficient showing that the instrument was stable. The instrument used for data collection was administered to the respondents by the researcher in the study area. Mean and standard deviation was used to analyze the data collected for the study.

III. Results

Research Question One:

What are the constraints of Covid-19 on online teaching and learning in technical colleges in Ekiti State.

Table 1: Mean response of constraint of Covid-19 on online teaching and learning in technical colleges in Ekiti State. Nigeria.

S/N	ITEMS	SA	A	D	SD	MEAN	SD	DECISION
1	Poor internet connection and access to digital devices	47	67	24	12	2.98	0.64	Agreed
2	Non-qualified and experienced teaching Teachers	70	37	37	6	2.89	0.62	Agreed
3	Attitude of student to learning	52	30	34	34	2.53	0.41	Agreed
4	Parental decision	54	25	54	17	2.57	0.40	Agreed
5	Environmental and peer group	59	47	32	12	3.00	0.63	Agreed

Table 1, shows the constraints to online teaching and learning process as a result of the unprecedented situation with the Covid-19 pandemic in technical colleges in Ekiti State. Nigeria. From the table the mean perception ranges from 2.53 to 3.00 indicating a high degree of acceptance of objective to be achieved and standard deviation values (0.40 to 0.64), showing the closeness in the responses of the respondents. The table shows that all the respondents agreed to all the items.

Research Question Two:

What are the challenges faced by technical college students and teachers during Covid-19 in Ekiti State. Nigeria.

Table 2: Covid-19 challenges faced by technical college students and teachers in Ekiti State, Nigeria

S/N	ITEMS	SA	A	D	SD	MEAN	SD	DECISION
6	Some courses were not taught due to the fact that some teachers do not understand online or virtual teaching method	56	50	31	13	3.0	0.63	Agreed
7	Teachers could not carry out practical teaching due to online classes	46	80	17	7	3.10	0.76	Agreed
8	Lack of consultation with teachers for guide and explanation	58	66	16	10	3.14	0.75	Agreed
9	Lots of error: on students assessment due to online classes	40	75	26	9	2.98	0.66	Agreed
10	Students are not willing and ready to learn due to their lack of knowledge and experience of online learning	37	57	42	14	2.77	0.50	Agreed

KEY: X=Mean, SD=Standard deviation.

Table 2 shows the mean response of the Covid-19 challenges faced by technical college students and teachers in Ekiti State, Nigeria. The table shows the mean perception ranging from 2.44 to 3.14 and standard deviation values of (0.34 to 0.76), when the Likert scale of 4-point was used. From the table, it was indicated that the respondents neither agreed nor disagreed with item 10 while other items in the table shows an agreement by the respondents. From the table, it indicated that students are challenged in the practical aspect because no practical class was offered due to online learning process. It also revealed that due to lack of consultation with the teachers for more explanation, the student are not able to understand some of what the teachers were teaching through online class.

Research Question Three:

What are the benefits that pandemic has brought to technical colleges in Ekiti State, Nigeria.

Table 3: The benefits that pandemic has brought to technical college in Ekiti State, Nigeria

S/N	ITEMS	SA	A	D	SD	MEAN	SD	DECISION
11	Pandemic has helped the teacher to introduce another method of teaching via the virtual method	39	66	33	12	2.87	0.57	Agreed
12	Pandemic has made it compulsory for technical college teachers to learn how to operate online classes	38	67	33	12	2.87	0.57	Agreed
13	School administrator find it so easy to assess teachers activities and students performances	36	72	30	12	2.87	0.61	Agreed
14	Overcoming the limitations of virtual teaching and learning	40	63	23	24	2.80	0.55	Agreed
15	Pandemic has allowed teachers hold classes with students at anytime of the day	36	58	42	14	2.77	0.50	Agreed

Table 3 above shows the mean response of benefits that pandemic has brought to technical colleges in Ekiti State, Nigeria. The table shows the mean perception ranging from 2.44 to 2.87 and standard deviation values (0.34 to 0.61). Likert scale of 4-point was used, it indicated that all the respondents agreed with all the items in the table. From the data of the table, it shows that pandemic had brought more benefit to educational system.

IV. Discussion of the Findings

The Covid-19 pandemic and impact on the teaching and learning of technical college students in Ekiti State, Nigeria revealed in table 1 shows that the respondents agreed on all the items which means the findings in table 1 are constraints of Covid-19 on online teaching and learning in technical colleges in Ekiti State which are poor internet connection and access to digital devices, non-qualified and experienced teaching Teachers, attitude of students to learning, parental decision, environmental and peer group.

The findings are in accordance with Gedzune(2015) that there should be proper instructional planning by the teacher before going to class to implement the

teaching. It was also recommended that adequate instructional materials should be provided for the teaching and learning in technical colleges in Ekiti State.

The result in table 2 show the findings on challenges faced by technical students and teachers in Ekiti State, Nigeria which is that some courses were not taught due to the fact that some teachers do not understand virtual teaching, teachers could not carry out practical teachings due to online classes, lack of consultation with teachers for guide and explanations, lots of errors on students assessments due to online classes and students are not willing and ready to learn due to lack of knowledge and experience of online classes.

The finding is in accordance to the Digital (2020) Global overview report, 58% of Nigerians are not connected to the internet. However, mobile devices show more promising trends. The report pointed that 169.2 million people -83% of Nigerians have access to mobile phone connections but 50% of these are urban dwellers (Hootsuite, 2020). If we consider subscribers with multiple devices and subscriptions, the number would be significantly lower raising concerns for inequality of access to learning for many children which will also happen to technical college students in Ekiti State, Nigeria.

The result in table 3 showed the benefits that pandemic has brought to technical colleges in Ekiti State, Nigeria. Some of them are, pandemic has helped the teachers to introduce another method of teaching through online classes. Pandemic had made it compulsory for technical college teachers to learn how to operate online classes, school administrators find it so easy to access teachers activities and students performance, overcoming the limitations of virtual teaching and learning, pandemic has allowed teachers to have classes with students at anytime of the day.

The finding is in accordance with Kamanetz(Sun et al., 2020) that the unexpected arrival of the pandemic and subsequent school closures saw massive effort to adopt and innovate by educators and education system around the world, so also, this innovation and development had spread to teaching and learning in technical colleges in Ekiti State, Nigeria.

V. Conclusions

Based on the findings of the study, the following conclusions were drawn:

1. To identify the constraints of the online teaching and learning process as a result of the unprecedented situation with the Covid-19 pandemic in Ekiti State. Nigeria.
2. To identify ways to address the challenges faced by technical college students and teachers in using virtual learning platform as a result of the Covid-19 pandemic in Ekiti State. Nigeria.
3. To identify the benefits that pandemic has brought to Technical colleges in Ekiti State. Nigeria.

VI. Recommendations

Based on the funding of the study, the following recommendations were made:

1. The government and other relevant education bodies and stakeholders should provide stable electricity, quality and standard internet connection and remote learning tools like radio, mobile phone, laptops among others for teachers and students in technical colleges in Ekiti State. Nigeria.
2. Government should always organize training and seminar for the teachers to update their knowledge
3. The opportunities which pandemic has brought through the use of online, ICT, mobile phone and laptop among others should be strictly adhered to.
4. Government, school administrator and education stakeholders should look into the challenges facing remote learning in technical colleges in Ekiti State and provide necessary solutions to them.

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