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Awareness of students' on the utilization of online learning evironment in covid-19 era in universities in Rivers State

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Abstract
The study assessed awareness of students on the utilization of online learning environment in Covid-19 era in universities in Rivers State. Two objectives, two research questions and two hypotheses guided the study using descriptive survey design. The population of the study was seven thousand seven hundred and ninety (8,761) students in the Faculty of Education in three public universities in Rivers State. The sample size was six hundred twenty seven (627) respondents, drawn through multistage sampling technique. Awareness of students on the utilization of online learning environment Questionnaire (ASOUOLEQ) was used for data collection. Face and content validities were ensured by experts in measurement and evaluation. Reliability coefficient of (0.730) was established using Pearson Product Moment Correlation. Mean and Standard deviation were used to answer the research questions, while Analysis of Variance (ANOVA) was used to test for null hypotheses at 0.05 level of significance. Findings revealed that majority of the students are aware of Zoom platform, while moderate numbers of students are aware of Google classroom. Thus, it was recommended that teachers and students be adequately exposed to zoom platform and Google classroom. Also, teachers should prepare their online lessons using zoom platform and Google classroom.

Keywords: awareness, online learning environment, students', utilization, covid-19 era

Introduction

ICT is becoming a useful resource on a worldwide scale. Because of how common it is, it has impacted all facets of human endeavor. The term "ICT" refers to a broad range of digital tools and resources that are utilized for the transmission, management, and storage of data. With the help of various digital tools and services, students in industrialized nations may now engage, learn, and have fun at any time and from any location. Information and communication technology allows for the creation of these digital instruments (ICT). Information and communication technology allows students and lecturers to participate in online classrooms, promoting learning, interaction, and cooperation without the need for face-to-face interactions (Olele and Abraham, 2016) [5].

This is a developing trend in digital transformation, and many schools all around the world now offer partially blended online and offline classes. According to Lasi, more than 85% of universities now provide online courses, and more than 62% do so for entire academic degrees (2021). As the world gets closer to 5G technologies, more schools are providing students with online education. With the introduction of high-speed internet, it is anticipated that the growth of online learning would increase. Undoubtedly, the environment of online education is becoming more vibrant and ubiquitous. The traditional style of delivery has been familiar to and ingrained in the minds of students for a very long time in the less developed nations of Africa, such as Nigeria. Students thus have trouble learning even with the most cutting-edge digital tools and online learning environments.

Governments all across the world have rushed to promote these online learning platforms as a result of the Covid-19 epidemic's quick growth in Wuhan, China in December 2019. According to Olayemi, Adamu, and Olayemi, the World Health Organization proclaimed the Corona virus a global pandemic on March 11, 2020, due to the disastrous impact on populations all over the world brought on by an increase in Corona virus infections (2021). The pandemic interrupted the educational system, and one measure taken to stop the infection from spreading included ordering students to leave schools. The Nigerian government, through the Ministry of Education, has implemented precautionary measures, including an emergency plan, to transition to online learning in order to guarantee that children continue to receive an uninterrupted education. In order to deploy online learning across the pandemic, the Ministry of Education, for instance, developed numerous portals. One of them was using radio and television to help kids get ready for the Junior Secondary Certificate Exam (JSCE).

All schools in the nation tried to implement online learning platforms including Google Classroom, Zoom, Whatsapp, Telegram, Classmates, and others in an effort to lessen the consequences of the pandemic. The Zoom platform and Google Classroom, however, were the main topics of this piece. It's possible to learn online with Google Classroom. Customizing students' educational experiences is a major concern (Engelbrecht, Llinares and Borba, 2020) [2]. Additionally, educators and students can simply collaborate online on the Zoom platform. For holding conferences, webinars, and online meetings, many people use Zoom

Meeting. According to Guzachchova (2020) [3], the Google could advance your training initiatives. You can broadcast it to everyone in the world who needs it in addition to receiving an exciting and dynamic learning experience.

Eck, Layfield and Di Benedetto, (2021) [1] in the midst of the COVID-19 epidemic, the proficiency of teachers of agriculture education in schools were examined. The majority of instructors stated that Google Meet served as the synchronous delivery platform for their university, according to the study's findings. People who utilized Google Meet had inadequate skills using the smartphone app to start meetings and use virtual backgrounds. The second-most used platform for synchronous delivery was Zoom. When using Zoom, SBAE teachers found a number of skill gaps, including the need for breakout rooms, polling, and the ability to delete unwanted participants. The accessibility capabilities in Microsoft Word and PowerPoint were reported to be poorly understood by SBAE teachers. It was advised that SBAE teachers receive more in-service training in advanced Zoom, Google Meet, and WebEx technologies.

In order to study English, Salam (2020) [8] looked at how students used Google Classroom. The information was gathered from 119 English Education students' responses on open-ended Likert Scale questionnaires. The questionnaire addressed the following five topics: availability of Google Classroom, perceived usefulness, communication and interaction, educational delivery, and student happiness. Conversely, open-ended questions probed students' actual experiences. The findings showed that the mean score had the following distribution: 4,49 for easy access to GC, 3,93 for perceived utility, 3,63 for communication and interaction, 4,10 for educational delivery, and 3,82 for student satisfaction. The use of Google Classroom was discussed by some pupils. Some of them claimed that Google Classroom brought their classes to them in person so that they could take part and continue working on them after normal business hours. Even many of them continued to work and submit their assignments until the wee hours.

Based on the following paired hypothesized constructs: awareness, technical barriers, perceived ease of use, operational ability, and behavioral intention to use, Saidu (2018) [7] looked at the relationship between teachers' use of Google Classroom. Using spearman's correlation analysis, this study examined the connections between the research constructs. The researchers studied lecturers from Bangladesh and Nigeria. There were 54 respondents, including 27 each from Nigeria and Bangladesh. In terms of awareness and perceived ease of use, Bangladesh only showed a minor correlation with the other related aspects, according to the data. However, no connection between technological difficulties and perceived ease of use was made throughout the entire response.

Statement of the problem

Social gatherings and educational activities have been affected by COVID-19 (Coronavirus) outbreaks. For all institutions to restart disrupted educational activities, the Federal Government of Nigeria ordered that they use online learning approaches. For example, Google Classroom, Zoom, Whatsapp, Telegram, Classmates, and Edmodo are just a handful of the learning tools that have been employed in schools. Unfortunately, this teaching was given without fully assessing the students' knowledge of how to use these classroom and Zoom learning management system internet resources. This led to several problems, including a lack of technological skills, little to no expertise with online teaching and learning tools, and restricted access to learning instructors and resources.

Aim and objectives of the study

The aim of this study is to establish awareness of students on the utilization of online learning environment in Covid-19 era in universities in Rivers State.

The study seeks to:

1. Determine students' awareness level of Zoom platform in COVID-19 era in Universities in Rivers State
2. Investigate students' awareness level of Google classroom in COVID-19 era in Universities in Rivers State

Research questions

The following research questions are intended to guide the study

1. What is students' awareness level of Zoom platform in COVID-19 era in universities in Rivers State?
2. What is students' awareness level of Google classroom in COVID-19 era in universities in Rivers State?

Hypotheses

The following null hypotheses will guide this study

1. There is no significant difference in students' awareness of Zoom platform in COVID-19 era across the three universities in Rivers State.
2. There is no significant difference in students' awareness of Google classroom across the three universities in Rivers State.

Methodology

The research was done in Rivers State of Nigeria. Descriptive research design was adopted for this study. Students from the Faculty of Education at three public universities in Rivers State made up the study's population of 8,761 people. Six hundred twenty-seven (627) respondents, chosen using a multistage sampling procedure, made up the sample size. Data were gathered using the ASOUOLEQ, a questionnaire on student awareness of and use of the online learning environment. Experts in measuring and evaluation validated the validity of the face and substance. The Pearson Product Moment Correlation was used to calculate the reliability coefficient, which was (0.730). The study questions were answered using the mean and standard deviation, and the null hypotheses were tested using an analysis of variance (ANOVA) at the 0.05 level of significance.

The questionnaire is made up 48 items, including sections 1 and 2. Section A gathered demographic information of respondents while section 2 contained items relating to awareness. Section 2 comprised of two clusters; representing the two objectives of the study. The first clusters measured the awareness level of zoom application (ALZA), the second cluster measured the awareness level of Google classroom (ALGC). The response of these clusters were rated on a five-point scaled as Very High Level (VHL) - 5, High Level (HL) – 4, Moderate (ML) – 3, Low Level (LL) – 2 and Very Low Level (VLL) – 1, with a mean criterion of 3.0 respectively.

Experts in measuring and evaluation determined the face and content validity of the instrument. Through the test-retest procedure for a measurement of its stability, the instrument's reliability was ascertained. The reliability test involved twenty undergraduate students who were not part of the study population. The respondents were given copies of the survey in order to get their feedback. The same instrument was once again delivered to the same sample after a two-week interval. The kids' school and matriculation numbers were used to identify the responses. The Pearson Product Moment Correlation method was used to correlate the sample's initial and retest results. The tool had a reliability coefficient of 0.730. The statistical analysis of the data was carried out utilizing the Statistical Package for Social Science (SPSS) version 22 computer program. The study questions were answered using mean and standard deviation, and the hypotheses were tested using analysis of variance (ANOVA) at the 0.05 level of significance.

Data Analysis

Research question one: What is students' awareness level of Zoom platform in COVID-19 era in universities in Rivers State.

Table 1: Mean and standard deviation on the difference in student's awareness level of Zoom platform in covid-19 era in Universities in Rivers State.

S/N	Item	Respondents (n = 627)							
		VHL	HL	M	LL	VLL	Mean	SD	Remark
1	Zoom platform can be used for classroom teaching and learning from any location.	275	216	101	26	9	4.152	0.934	HL
2	Zoom platform can be used for group discussion or even one-on-one meeting.	269	256	82	17	3	4.230	0.812	HL
3	Zoom platform is an easy-to-use tool to create a video meeting, invite colleagues, solicit participation, and share resources.	247	245	113	20	2	4.140	0.844	HL
4	Zoom has been the most preferred app worldwide for its amazing features and benefits	149	249	182	37	10	3.781	0.928	ML
5	Zoom's annotation tool allows users to make notes with pens, arrows, or highlighters.	135	246	183	48	15	3.699	0.969	ML
6	Zoom platform is a web-based collaborative video conferencing tool that provides quality audio, video, and screen sharing.	235	223	131	32	6	4.035	0.935	HL
7	A fast internet connection is required for smooth operation, when using Zoom platform.	325	180	101	18	3	4.285	0.870	HL
8	Zoom platform is user-friendly.	219	242	138	21	7	4.029	0.897	HL
	Grand Mean						4.04		

Criterion mean = 3.00(mean< 3.00=low level, =3.00=moderate, mean > 3.00 = high level)

Table 1 presents the responses obtained from students' awareness level of Zoom platform in COVID-19 era in universities in Rivers State. It was observed that students responded High Level (HL) to items (1), (2), (3), (6), (7), and (8). However, students responded Moderate level (ML) to item (5) respectively. This means that majority of students' are aware of Zoom application in COVID-19 era inn universities in Rivers State

Hypothesis one

There is no significant difference in students' awareness of Zoom platform in COVID-19 era across the three universities in Rivers State.

Table 2: Summary of Analysis of variance (ANOVA) of students' awareness of Zoom platform in COVID-19 era across the three universities in Rivers State.

ALZATOT					
	sum of squares	**df**	**Mean square**	**f**	**sig.**
Between Groups	98.705	2	49.352	2.033	.132
Within Groups	15144.925	624	24.271		
Total	15243.630	626			

Table 2 reveals the sums of squares are 98.705 and 15144.925 while the mean squares are 49.352 and 24.271, with degrees of freedom of 2 and 624, the F ratio value of 2.033 was not significantly different in students' awareness of Zoom application in COVID-19 era across the three universities in Rivers State. (df, 624 = 2.033, P > 0.05). Hence, the null hypothesis one is retained at 0.05 level of significance.

Research question two

What is students' awareness level of Google classroom in COVID-19 era in universities in Rivers State?

Table 3: Mean and standard deviation on the difference in student's awareness level of Google classroom in covid-19 era in Universities in Rivers State.

S/N	Item	Respondents (n = 627)							
		VHL	HL	M	LL	VLL	Mean	SD	Remark
9	Google Classroom application can be accessed through a Smartphone.	312	186	103	15	11	4.233	0.929	HL
10	Google Classroom is a tool that makes students and teachers build communication.	182	255	139	37	14	3.884	0.968	ML
11	The teacher can freely create and share an assignment for Students using Google Classroom.	241	201	137	37	11	3.995	0.999	ML
12	Google Classroom helps teachers to save their time, keep classes organized, and improve communication with students.	206	212	156	40	12	3.895	0.998	ML
13	Google Classroom is a tool that facilitates students and teacher collaboration.	127	217	230	40	13	3.646	0.942	ML
14	Google Classroom is a friendly mobile application that is designed to be responsive.	167	230	167	50	13	3.778	0.995	ML
15	Google Classroom is downloaded for free but it must be placed at the level of educational institutions.	197	185	163	49	33	3.740	1.138	ML
16	Google classroom is like a virtual extension of brick and mortar classrooms.	156	212	187	43	28	3.679	1.060	ML
	Grand Mean						3.86		

Criterion mean = 3.00(mean< 3.00=low level, =3.00=moderate, mean > 3.00 = high level)

Table 3 presents the responses obtained from students' awareness level of Google classroom in COVID-19 era in universities in Rivers State. The table shows that students responded High Level (HL) to item (9), while students responded Moderate level (ML) to items (10), (11), (12), (13), (14), (15) and (16) respectively. This means that moderate number of students' are aware of Google classroom in COVID-19 era in universities in Rivers State

Hypothesis two

There is no significant difference in students' awareness of Google classroom across the three universities in Rivers State.

Table 4: Summary of Analysis of variance (ANOVA) of students' awareness of Google classroom across the three universities in Rivers State.

ALGATOT					
	Sum of Squares	**Df**	**Mean Square**	**F**	**Sig.**
Between Groups	398.383	2	199.192	5.116	.006
Within Groups	24294.181	624	38.933		
Total	24692.565	626			

Table 4 Shows that the sums of squares are 398.383and 24294.181while the mean squares are 199.192and 38.933, with degrees of freedom of 2 and 624, the F ratio value of 5.116 was not significantly different in students' awareness of Google classroom across the three universities in Rivers State. (df, 624 = 5.116, P > 0.05). Therefore, the null hypothesis two is retained at 0.05 level of significance.

Discussion of findings

The study assessed the awareness of students for online learning environment in Covid-19 era in universities in Rivers State. From the data collected, and analysis carried out, the findings in table 1 showed that majority of the respondents are aware of zoom application in COVID-19 era in universities in Rivers State. Furthermore, the result of table 2 shows that there is no significant difference in students' awareness of Zoom platform in COVID-19 era across the three universities in Rivers State. These findings is in agreement with the findings of Eck, Lay field and Di Benedetto (2021) [1], their findings revealed that, the majority of the participants were able to use Zoom platform moderately. Also, Salam (2020) [8] noted that Google Classroom brought their courses to their face so that they can participate and continue work on their classes beyond the working hours. Even many of them still worked and uploaded their assignments till midnight.

Table 3 indicated that students' are aware of Google classroom in COVID-19 era in universities in Rivers State. Furthermore, the result of table 4 shows that there is no significant difference in students' awareness of Google classroom in COVID-19 era across the three universities in Rivers State. These findings corroborated by the study of Saidu (2018) [7], noted that participants are aware of Google classroom and also perceived ease of use.

Conclusion

Every social activity, including educational activities, was affected by the pandemic. But the government urgently ordered all educational activities to start taking place online in order to guarantee a continuous flow of instruction. The use of online learning has made students' levels of awareness more apparent. Recurring themes found in the surveys indicated that there was only a low level of awareness regarding the adoption of online learning platforms during the epidemic. Additionally, there is concern over the high cost of data, subpar internet services, unstable power supplies, lack of access to online library resources, and restricted computer use.

Recommendations

1. Teachers and students should be adequately exposed to zoom platform and Google classroom.
2. Teachers should prepare their online lessons using Zoom platform and Google classroom.
3. There should be regular workshops on the importance of Zoom platform and Google classroom

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