

## Faculty's and Student's Perceptions and Adjustments to Online Learning in the Era of COVID-19 in the Universities in the North East, Nigeria

<sup>1</sup>Odaudu, Sunday Adejo, <sup>2</sup>Jutum, Joel Isaiah, <sup>3</sup>Adejo-Odaudu, Victoria Omomine

<sup>1</sup>Department of Educational Foundations, Taraba State University, Jalingo

<sup>2</sup>UNICEF Education Office, Adamawa State Ministry of Education, Yola

<sup>3</sup>Department of Social Science Education, Taraba State University, Jalingo

### Abstract

*Due to paucity of resources, transitioning to remote learning environment was difficult in Nigeria during Covid-19. This study investigates faculty's and students' perceptions and adjustments to online learning in the period of COVID19 in the universities in the North East Nigeria through a descriptive survey research design. 384 faculties' and 384 students' respectively were the sample selected through a multi-stage sampling from five universities in the North East, Nigeria. FSPAOQ with a reliability coefficient of .89 was used to collect data using Google Forms. Mean and standard deviation and Linear Regression Analysis was used to test the hypothesis at 0.05 level of significance. Based on the analyses, 14.1 % of faculties' and 12.3% of students' adjustment to online learning could be explained by their perception with  $R^2 = 0.141$  and  $R^2 = 0.123$  respectively. The level of significance of faculties', students' perception and adjustment was significant (with  $R = .376$ ;  $F = 62.890$ ;  $P < 0.05$ , and  $R = .350$ ;  $F = 53.420$ ;  $P < 0.05$  respectively). Hence, Faculty and Students' perceptions have the potential of explaining students' adjustment to online learning in the Universities in era of COVID-19 in the North East, Nigeria. Necessary recommendations were made for planning education and for policy.*

**Key Words:** COVID-19, Online learning, Adjustments, Faculty's, Universities

### Introduction

COVID-19 pandemic has become a popular discussion topic in the last three years. COVID-19 virus has been ravaging the world since it was discovered in December 2019 in Wuhan, China. COVID-19 is classified to be in the family of the severe acute respiratory syndrome (SARs) and as a result of its rapid transmission, the World Health Organisation acknowledged it as a major pandemic comparable to the flu pandemic that ravaged the world in 1918, which was primarily caused by an H1N1 influenza virus with its genes originating from avian species (www.cdc.gov.). COVID-19 symptoms manifest in fever, chills, cough, shortness of breath or difficulty in breathing (UNICEF, 2020). The protocols stated by the government as a means to curb the transmission of COVID-19 includes the usage of facial masks, self-isolation, maintaining sufficient distance between people and the temporary closure of academic institutions (Wiranto and Syakurah, 2022; UN, n.d). As it were, expert's fear was that the COVID-19 pandemic will grow into an endemic situation suggesting that the pandemic

will not be terminated by the disappearance of the virus. Although global efforts to provide vaccination against the virus has been hailed with increasing global public health infrastructure and surveillance system put in place, it has nonetheless changed the way we live and do things on various aspects; especially in the educational, socio-cultural, and economic spheres.

In the sphere of education, COVID-19 has caused shock, fear among students and teachers and cancellation of in-person classroom instructions and then learning was adjusted to be in the format of learning and teaching remotely in March 2020 while attempting to contain a further spread of the virus (DiPietro, Biagi, Costa, Karpinki and Mazza, 2020). The first country to impose school closure was Peoples Republic of China on 16<sup>th</sup> February, 2020 in some parts of China (Schleicher, 2020). Other countries also started closing up schools, not necessarily bringing a complete stop to teaching and learning activities as the pandemic cases increased. The enforcement of the physical distancing policy spanned across many nations.

The Nigerian government also implemented this policy, leading to the closure of all academic institutions across the nation. Universities were urged to make adjustments appropriately such that the learning process of students can continue, and also sustain the academic progress of students. The methodology of teaching and learning in most countries were immediately re-configured to being a full-time online learning format (Amir et al., 2020).

Online learning spans across a spectrum of technological tools, some of which are the worldwide web, internet, social media chats, new groups and texts, emails, audio and video conferencing delivered through computer networks to create a means for teaching and learning (Dhull and Sakshi, 2017). As an element of distance learning, it usually had concerns for the creation of accessing educational experiences which considerably has flexibility in space and time as that of the campus-based education (Anderson, 2011). Thus, online learning can be seen from different perspectives. Online learning can be synchronous and asynchronous modes. Synchronous technology gives room for live interactive sessions between students and their instructor through audio/video conferencing and web chats media. The asynchronous technology on the other hand involves a time lag between the release of instruction from the teacher and its receipt from students in forms of pre-recorded videos, emails, forums and instructions.

In Nigeria, the challenge with online learning however are the need to implement courageous and bold actions to resolve the many socio-economic challenges which have not yet been attended to, matters including skilled human resource, dependable infrastructures, open government and other essential sequences of building capacity (Federal Republic of Nigeria (FRN, 2001). For the teachers, there is a challenge in the expanse of their knowledge with the usage of Information and Communication Technology (ICT) for carrying out educational activities (Honan, 2008), the adjustment to new and different mode of learning, the association of online learning with the use of some technologies which needs teachers and student's adjustment to technological change (Arlinwibowo, Retnawati, Kartowagiran and

Kassymova, 2020), it is likely that students lose on learning while under lockdown (DiPietro, et al., 2020), and the fact that some educational programmes require blending face-face learning with online learning. Some educational programmes make use of laboratory, tutorials, and acquisition of clinical knowledge and learning assessments in form of objective clinical examinations and block examinations. For example, medical students are required to acquire not only basic knowledge but practical skills gotten in the laboratory and during clinical involvements (Wiranto and Syakurah, 2022).

Online learning also known as E-learning involves the utilization of the Internet and other notable technological facilities for the creation of materials for academic purposes, educational distribution, and management of programs through the internet. Empirical studies such as Almahasees et al., (2021); Mpalanyi, Nalwyiso, and Mubuuke (2020); Nasution, Nasution, Batubara and Munandar (2022) reported that countries exploited vast sorts of resources to augment the learning process of students while the school closure policies subsist. These resources include instructional materials (printouts, worksheets and textbooks), radio education, educational television and online learning. The pandemic forced the closure of schools and face-to-face lessons had to be shifted to the online space. UNESCO (2020) reported that in Iceland, primary schools were left open on the condition that size of classes were not more than 20 students. Most of the primary and lower secondary schools in Sweden remained open, while the upper secondary schools translated majorly to distance learning. In Uganda, the Makerere University, carried out problem based learning (PBL) online using Zoom and other LMS (Mpalanyi, Nalwyiso, and Mubuuke, 2020). The main lesson learnt from the pandemic has been the strategic improvement in global health and lives generally and in particular, the adjustment to online education during the COVID-19 period and beyond.

Several studies have suggested several online learning in universities using technological developments that could be used in the COVID-19 pandemic era. These technologies are

DingTalk, Zoom, Twitter, Slack, Whatsapp, YouTube and email. Others are applications such as Google classroom, Microsoft Teams, Voxvote and Canvas (Nasution, Nasution, Batubara and Munandar, 2022), and Telemedicine and Tele-teaching (Choudhary and Gupta, 2015) to explore synchronous and asynchronous discussions. The teacher supplies instructional materials and then obtains feedback on the subject of discussion. As optimistic as these are, they cannot replace patient contact directly as in the case of medical education (Wiranto and Syakurah, 2022).

The perceptions of stakeholders on the benefits and otherwise of online learning varies. This is especially so when new technologies, new approaches and new learning environment are involved. What shapes and influences faculty and the perception of the students of online learning and adjustment is their sense of achievement in learning, satisfaction with resources, the aid they receive, technical mastery of the process, intellectual motivation, emotional stimulation, convenience with the process, and consciousness of a learning community (Malau-Aduli, 2021). Their adjustment, which is the way they individual attempts to deal with changes in the mode of learning, tensions and conflicts and meets his or her needs, and maintain harmonious relationship with the environment is very critical to making learning fun, participatory and successful. The four main areas of adjustment, according to Malau-Aduli (2021), are social, academic, personal-emotional, and goal/institutional. The academic adjustment deals with an individual's capacity to cope with educational demands, such as motivation to complete academic requirements, academic effort and performance, and academic satisfaction. The emotional adjustment deals with an individual's behavior in his or her relationships with people inside and outside of the school. Goal and institutional adjustments, meanwhile, pertain to how satisfied a person is with the university as a whole. These modifications are necessary components of how academic staff and students are able to meet the new demands of online learning.

The COVID19 pandemic has had a calamitous effect on the world-wide economy and particularly on education in developing countries. The education system world over was faced with a crises which created uncertainty among critical stakeholders in the education industry and posed a threat to the education system performance and sustainability. Transitioning to remote work and learning environment has remained one of the nagging issues in our education development trajectory in view of cost of data and bandwidths availability. However, efforts are being made to help faculties and students adjust to online learning mode. The challenges posed by the transition from in-class learning to online learning amidst the COVID-19 era are undoubtedly unique and diverse. Both faculty's and students are likely to have serious complexities in adjusting to the new virtual environment of learning. The challenge is likely to worsen the inequalities in the existing educational set-up. This is a major concern. Yet, it has not been uniformly addressed for all universities whether public or private as not all academic institutions were set to execute it due to uneven access. For example, not all schools have the requisite ICT infrastructures, while poor students with poor home environment lack resources to support their learning and the teachers are likely to have less ICT competencies to facilitate learning. Universities differ in their level of educational development. Thus, in Nigeria shift to online learning has not been possible considering that universities in Nigeria seemed unprepared during this transitional moment, while teachers and students must reposition themselves while attempting to find meaning amidst the many issues in relation to the pandemic. The perception of online learning is impacted by one's standing perspective and value system. Students' perceptions of online learning are critical to their academic success particularly, since they are the *raison d'etre* of the educational endeavour. Since it appears the COVID-19 is here to stay, the question is: how prepared are faculty's and students to use of online learning in the COVID-19 era? How effective can ICT be used for online learning in the COVID-19 period? Although researches on COVID-19 are emerging, studies on this critical aspect of faculty's and student's perceptions and adjustment to online learning

amidst COVID-19 in Nigerian universities in the context of the North-East Nigeria is still emerging.

### Purpose of the Study

The purpose of this study is to research and investigate faculty's and students perceptions and adjustment to online learning in universities in the North East Nigeria. Specifically, the objectives of the study are to investigate:

1. the perception of online learning by faculty's and students in universities during the COVID-19 era in the North East, Nigeria
2. the relationship between respondents perceptions and adjustment to online learning in universities in the COVID-19 era in the North East, Nigeria?

### Research Questions

The following research questions were laid out to guide the study:

1. What is the faculty's perception of online learning in universities in the era of COVID-19 in the North East, Nigeria?
2. What is the students' perception of online learning in universities in the era of COVID-19 in the North East, Nigeria?

### Research Hypothesis

Ho1: There is no significant relationship between faculty's perception and adjustment to online learning in universities in the era of COVID-19 in North East, Nigeria.

Ho2: There is no significant relationship between students' perception and adjustment to online learning in universities in the era of COVID-19 in the North East, Nigeria.

### Methodology

The research design is descriptive survey. The population for the study was 16, 020 (representing 15, 554 students and 446 faculty (lecturers) in the faculties of education in the universities in the North East, Nigeria. The target population include students and faculty's in five out of the 11 public universities in the North East, Nigeria. The sample size was 384 teachers and 384 students respectively. They were selected through a multi-stage sampling. First, five universities were purposively selected for the study because of availability of ICT resources to enable participation in the

study. The universities are: Taraba State University, Jalingo, Adamawa State University, Mubi, Gombe State University, Gombe, Moddibo Adama University, Yola, and Federal University Kashere respectively. Second, snowball sampling was used to select respondents for the study. This is because this technique is most suitable in a situation where it is difficult and expensive to locate a large number of respondents by other means (such as simple random sampling) (Frcker, 2008). Also, this study relies on referrals from initial respondents to generate additional respondents who are willing and have the ICT tools to participate in the study. This is important to explore faculty's and students' perceptions of online learning in this region which according to Apuke (2018) is still witnessing slower technological change with little study conducted to ascertain the level of ICT use in learning. A validated questionnaire titled "FSPAQ" was used as the instrument for data collection, this was adapted from perception and adjustment questionnaire used in the existing literature (Almahasees et al., 2021; Harefa et al., 2022; Hilburget al., 2020). The data was collected using Google Forms. The instrument was pilot tested and analysed using Cronbach Alpha and yielded a reliability coefficient of .89 which was acceptable. Descriptive and inferential statistics were used in analyzing the data obtained. The descriptive statistics involved mean and standard deviations, and percentages to answer the research questions. Linear regression was used in the inferential statistics to test the hypotheses at 0.05 significance level. The results of the analyses with a mean score above 2.5 were accepted/ high (positive) while the mean score below 2.5 was taken as not accepted and low (negative). The p-value <0.05 was deemed significant.

### Results

The results of the study were presented based on the research questions and hypotheses raised to guide the study.

#### Research Question 1.

What is the faculty perception of online learning in universities in the era of COVID-19 in the North East, Nigeria?

**Table 1: Mean rating of faculty perception of online learning in universities in the era of COVID-19 in the North East, Nigeria**

S/No.	Items	Mean	Sd	SA	A	D	SD	Dec.
1	I have the IT competency to do online classes	1.768	.9565	30	124	37	193	disagree
2	Conducting online classes requires more efforts in comparison to face-to-face instructions	2.883	.6083	51	237	96	0	agree
3	I have to open the cameras to maximise their live interactions with students	3.380	.8769	221	115	21	27	agree
4	Online platforms have tools to facilitate online classes	3.281	.8514	195	115	61	13	agree
5	Traditional classes are more effective than online classes	2.914	.6220	0	59	233	92	agree
6	Theoretical and practical classes could be taught without real interaction between teachers and students	1.992	1.045	61	25	148	150	disagree
7	Poor quality of instruction due to lack of interaction between students and teachers	3.250	.8791	191	115	61	17	agree
8	Students with face-to-face learning perform better than students on online learning mode	2.943	.6755	73	220	87	4	agree
9	I can assess students fairly and know their individual differences better with face -to-face learning mode than online learning mode	3.339	.9282	217	115	17	35	agree
10	Online teaching is more cost effective than in-class learning	1.547	.8476	26	12	108	238	disagree
<b>Grand Mean</b>		<b>2.73</b>						

Table 1 above shows summary of scores, mean and standard deviation of faculty's rating of their perceptions of online learning in universities in the era of COVID-19 in the North East, Nigeria. Details of the analysis reveal that the respondents agree on items 2,3,4,5,7,8,9. But disagree on items 1, 6, and 10 which are below the criterion mean of 2.5. The grand mean is 2.73 which is higher than criterion mean of 2.5. This

implies that faculty's perception of online learning is high (positive) in the North East, Nigeria.

#### **Research Question 2.**

What is the student perception of online learning in universities in the era of COVID-19 in the North East, Nigeria?

**Table 2: Mean rating of students' perception of online learning in universities in the era of COVID-19 in the North East, Nigeria**

S/No.	Items	Mean	Sd	SA	A	D	SD	Dec.
1	I have sufficient equipment and facilities to participate in online learning (computer, android phones, softwares)	1.768	1.354	13	29	173	169	disagree
2	I have computer knowledge and ICT skills to manage my online learning	2.581	1.1736	124	68	99	93	agree
3	Online tools are easy to use	2.831	1.1380	152	84	79	69	agree
4	Online learning required efficient time management	2.927	.6299	63	230	91	0	agree
5	Using online learning enable one to gain experience of learning in a new environment	3.305	.9074	203	126	24	31	agree
6	Online learning is flexible and adaptable	3.302	.8565	199	119	49	17	agree
7	I am motivated to participate in online learning because of access to learning materials	2.177	1.0168	34	136	78	136	agree
8	I will be satisfied with teacher students interaction in online learning mode	3.370	.8989	221	115	17	31	agree
9	I have problem with bandwidths and internet connectivity from my home environment	2.016	1.0116	53	40	151	140	disagree
10	There are possibility of distractions from family and friends during online learning	2.883	.6812	64	216	99	5	agree
<b>Grand Mean</b>		<b>2.72</b>						

Table 2 above shows the summary of scores, mean and standard deviation of students' rating of their perception of online learning in universities in the era of COVID-19 in the North East, Nigeria. Details of the analysis reveal that the respondents agree on items 12, 13, 14, 15, 16, 18 and 20. But disagree on items 11, 17, and 19 which are below the criterion mean of 2.5. The grand mean is 2.72 which is higher than criterion mean of 2.5. This implies that the

students' perception of online learning is high (positive) in the North East, Nigeria.

### Hypotheses

H<sub>01</sub>: There is no significant relationship between faculty perception and adjustment to online learning in universities in the era of COVID-19 in North East, Nigeria.

**Table 3: Hypothesis testing the relationship between Faculty's perception and adjustment to online learning in universities in the era of COVID-19 in North East, Nigeria.**

Model	Sum of Square	DF	Mean Square	F	Sign
Regression	13.440	1	13.440	62.890	.000 <sup>b</sup>
Residual	81.639	382	.214		
Total	95.079	383			

  

Model Summary	
Model	1
R	.376 <sup>a</sup>
R Square	.141
Adjusted Square	.139
Standard Error of Estimate	.46229

Table 3 above shows that 14.1 % of faculty's adjustment to online learning could be explained by their perception ( $R^2 = 0.141$ ). Furthermore, the level of significance of faculty's perception was presented in the Regression ANOVA Table; the table shows that R value of .376<sup>a</sup> was significant ( $F = 62.890$ ;  $P < 0.05$ ). This implies that, faculty's perception have a positive relationship with adjustment to online learning in universities. Hence, faculty's perceptions

have the potential of explaining faculty's adjustment to online learning in the universities in the era of COVID-19 in the North East, Nigeria, to a certain extent.

Ho2: There is no significant relationship between Students perception and adjustment to online learning in the universities in the era of COVID-19 in North East, Nigeria.

**Table 4: Hypothesis testing the relationship between Students' perception and adjustment to online learning in universities in the era of COVID-19 in North East, Nigeria.**

Model	Sum of Square	DF	Mean Square	F	Sign
Regression	11.665	1	11.665	53.420	.000 <sup>b</sup>
Residual	83.414	382	.218		
Total	95.079	383			

  

Model Summary	
Model	1
R	.350 <sup>a</sup>
R Square	.123
Adjusted Square	.120
Standard Error of Estimate	.46729

Table 4 above shows that 12.3 % of students' adjustment to online learning could be explained by their perception ( $R^2 = 0.123$ ). Furthermore, the level of significance of students' perception was presented in the Regression ANOVA Table;

the table shows the R value of .350<sup>a</sup> was significant ( $F = 53.420$ ;  $P < 0.05$ ). This implies that, students' perception have a positive relationship with adjustment to online learning in universities. Hence, students' perceptions

have the potential of explaining students' adjustment to online learning in universities in the era of COVID-19 in North East, Nigeria to a certain extent.

### Discussion

The study investigated whether faculty and students perception relates significantly with their adjustment to online learning during the period of COVID-19 in North East, Nigeria. Results indicated that perception relate significantly to adjustment to online learning from the perspective of both faculty's and students.

Findings of this study revealed that faculty (university lecturers) members in universities in the North East, Nigeria have high (positive) perception about online learning and demonstrated that their perceptions relates with level of adjustment to online learning in the North East Nigeria. Ten items of the questionnaire were used to authenticate this position. From the findings, it was clear that lecturers in the universities are positive about online learning. However, there are of the opinion that conducting online classes requires more efforts in comparison to face-to-face instructions and that traditional class is more effective than online classes hence their preference for traditional face-to-face instruction than online. This agrees with Almahasees et al., (2021) and Kamal and Illiyan (2021). The lecturers believe that practical and theoretical classes could be taught without vivid interaction between students and teachers in an online classroom, resulting in poor quality of instruction due to lack of interaction between students and teachers.

The study also revealed high (positive) students perception and this is related to their adjustment to online learning in universities in the era of COVID-19 in the North East, Nigeria. Their perceptions significantly relate to their adjustment to online learning. They maintain that using online learning enable one to gain experience of learning in a new environment. Also, the students agree that they have computer literacy and ICT skills to handle their online learning. However, they lack adequate

equipment and facilities to engage in online learning (computer, android phones, soft wares), coupled with the problem with bandwidths and internet connectivity from their home environment considered online learning to be costly. Students' perceptions of online learning agree with Khan, et al., 2021. In their study the students are confident of their abilities to make use of E-learning platforms. It is expected that students' perception would influence their satisfaction positively through interactive online learning. But in a study by Al-Bala et al., 2020: Gautam, 2020: Almahasees et al., 2021. students satisfaction was seen to be minimal because of technical issues, lack of interaction and training. This is so because during period of transition to online learning, Murphy et al., (2020) reported that negative emotions such as nervousness and anxiety were experienced by students. Similarly, Martin, Xie and Bollinger (2022) maintained that students found themselves experiencing uncertainties and insecurities pertaining to basic needs such as food and housing. Some passed through financial difficulties, the fear of the unknown, an absence of social connection and sense of belonging, and other issues that negatively affected their academic performance and overall well-being. Therefore, they need to be supported by the parents, teachers and the institutions to be motivated to learn in order enhance their academic performance.

The study found a statistically significant relationship between perception and adjustment to online learning in universities for faculty's' and students' (with  $R = .376$ ;  $F = 62.890$ ;  $P < 0.05$ , and  $R = .350$ ;  $F = 53.420$ ;  $P < 0.05$  respectively). Hence, faculty's' perceptions and students' perception have the potential of explaining faculty's' adjustment to online learning in universities in the era of COVID-19 in North East, Nigeria to a certain extent. This agrees with Harefa and Sihombing (2022). Studies have shown impact of online learning have been significantly observed on faculty members and students. They maintained that perceptions are critical to level of adjustment to online learning. School system needs to develop implementing procedures for online learning. to make learning fun for teachers and students.



### Conclusion

While accepting the generalization that online learning motivates and enriches students learning experiences in a new and creative manner, researches has shown, just like this one, that it is important to consider perception of students and indeed faculty in designing online models that will assist them adjust to online learning environment. This study has shown replete evidences that support the contention that the way faculty and students see online learning determine their motivation and participation in online learning. This is because online learning is still new and emerging, therefore, it requires teachers and students to coordinate educational activities with technologies in such a manner that will guarantee students participation, motivation and satisfaction whether academically, emotionally and socially. This is why their social and psychological adjustment to learning in the school is a desideratum. Therefore, each university need to plan their curriculum well by designing and adopting appropriate media and online learning modules that are flexible, and make social emotional and academic adjustment easy for students and faculties to make transition to online learning and assessment. This will make learning effective amidst the COVID-19 pandemic and its many variants.

### Recommendations

The following recommendations were made for planning.

1. Government should be encouraged to provide internet access at affordable price for institutions. This will make the cost of bandwidths affordable to faculty and students.
2. Teachers should be encouraged to be innovative to provide variation in learning approaches and models to stimulate the interest of students in online learning.
3. Parents should support the students in order to make online learning to be effective. This is because parents position on online learning and the value for online learning influences students perception and how they adjust academically to learning in the period of COVID19.
4. The university should provide the necessary infrastructural and technical supports as well as

the enabling environment to make the shift to online learning enjoyable and stress less for the teacher and students.

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