

A SURVEY OF IAUE STUDENTS' PERCEPTIONS OF ONLINE TEACHING AND LEARNING DURING 2020 COVID-19 LOCKDOWN

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ABSTRACT

This study investigated the perceptions of Ignatius Ajuru University of Education (IAUE) students on online teaching and learning as negative or positive, the reasons for their perceptions, factors that shape their perceptions, the effectiveness of the platforms that were used, and the factors that hinder a smooth digital classroom experience. The objectives of the study were to investigate IAUE students' perceptions on online teaching and learning as negative or positive, to ascertain the reasons of their perceptions, establish the factors that shaped their perceptions, and to determine the perceptions of the students based on the effectiveness of the platforms used and ascertain their perceptions based on the factors that hinder a smooth digital classroom experience. The study adopted three theories: selective influence theory – selective perception, cognitive dissonance theory and the development media theory. The study adopted a descriptive survey design, with a population of 23, 907, which was obtained from the school's registry. The sampling size was 392 and was derived through Taro Yamane's sampling formula. The sampling method was a stratified random sampling. The instrument of data collection was the questionnaire, which measured the students' responses in a Likert scale from strongly agree to strongly disagree. The findings of the study reveal that despite the challenge, the new media enhanced online teaching and learning. The conclusion of this study is that online teaching and learning had challenges, nevertheless, the students of IAUE coped with the challenges and were able to maximize the potentials and merits of the new media as a vehicle of education, thereby, enhancing the process of teaching and learning, especially during the 2020 covid-19 lockdown. The recommendations of this study are that students should be given the room or opportunity to air their suggestions for improvement on the online teaching/learning experience, and that the students should be more cooperative with the school authorities with regard to the online teaching and learning.

Keywords: Online Teaching and Learning, the Internet, Covid-19, Perception, Development, Education.

INTRODUCTION

Online communication is vital, particularly in this era of covid-19 pandemic. According to Ndimele & Innocent (2016), the term communication comes from the Latin word, 'communicado' or 'communicare', which means to share. They further defined communication as "...the transmission of information and messages which can impact positively or negatively on behaviour" (pp. 1 & 3). In other words, by simply exchanging information between two parties, communication can either make or mar the participants in the communication process. People's lives get influenced by the kinds of messages, ideas, attitudes and information that they allow to circulate around themselves.

This study focused on online teaching and learning, such a process can be alluded to 'online communication'. According to Bashin (2021), online communication refers to how

people communicate, connect, transact to send, retrieve, or receive information of any sort through the internet with the use of digital media/technology. Therefore, all communications that are done through the internet are known as online communication. Another definition of online communication is by Rogacka (2020), which says that "Online communication refers to how individuals or organizations communicate with each other through the internet. It happens via email, live chat, online forms, comments on websites, VoIP, instant messaging, social media sites, forums, and through other channels".

Due to the need to continue the education programmes during the covid-19 lockdown, the internet and digital media were maximized, making such a process an online communication for education. The term education is derived from Latin words 'Educare', 'Educere', which means to nourish/to bring up, to lead forth/to draw out, respectively. It is also derived from the Latin word 'Educatum', which is composed of two terms 'E' and 'Duco'. 'E' implies a movement from inward to outward and 'Duco' means developing or progressing. Education has also been described by some learned people as the act of teaching or training. Simply put, education is the process of facilitating learning, such that knowledge, skills, values, beliefs, and habits of a group of people are transferred to other people, through storytelling, discussion, teaching, training, or research. Hence, the purpose of education is to nourish the good qualities in man and draw out the best in every individual (Dhaker, 2016).

Covid-19, otherwise known as coronavirus, is "a large family of viruses that are common to cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS)," (World Health Organization, 2021). Covid-19 is a novel virus that was identified in 2019 in Wuhan City in China. It is a new virus that was never identified in humans until 2019. The covid-19 pandemic has been an ongoing pandemic caused by severe acute respiratory syndrome, coronavirus 2 (SARS – COVID-2). The outbreak was declared a Public Health Emergency of International concern by the World Health Organization (WHO) in January, 2020, and a pandemic in March, 2020, (World Health Organization, 2021).

The concern of this study is premised on the challenges that the students of Ignatius Ajuru University of Education (IAUE) faced with online teaching and learning, and therefore, the study investigated if the use of the new media enhanced or hampered teaching and learning. Due to the fact that technology has become very potent in shaping and mobilizing the society, it enhances development in many aspects; infrastructure, agriculture, education, medical/health sectors, etc. However, lack of appropriate knowledge and adequate skills in handling technology can be detrimental and reverse productive to the society.

The new development came almost as a surprise; many countries, including Nigeria were unprepared to adopt online teaching and learning as part of their schools' medium of education. As a result of this unpreparedness, there were series of challenges faced by schools in carrying out lectures online, partly because the Internet and digital structures of the classes were not yet tailored to suit the schools' curriculum. Therefore, the thrust of this study was to elicit the perceptions of the students of IAUE on the online teaching and learning embarked upon by the university in 2020 covid-19 lockdown.

Objectives of the Study

The aim of this study was to investigate IAUE students' perceptions of online teaching and learning during 2020 covid-19 lockdown. The specific objectives were to:

1. investigate IAUE students' perceptions of online teaching and learning, as negative or positive;
2. ascertain the reasons for the perceptions of IAUE students on online teaching and learning;

3. establish the factors that shape the perceptions of IAUE students on online teaching and learning;
4. determine the perceptions of IAUE students on online teaching and learning, based on the effectiveness of the platforms used;
5. ascertain IAUE students' perceptions of online teaching and learning, based on the factors that hinder a smooth digital classroom experience.

Conceptual Review

Barr & Miller (2013), described online teaching and learning as a representation of a two-sided relationship between students and teachers, which embraces the deliberate goal of assisting students to gain knowledge through the use of technology, internet and other aspects of the digital space. They were also of the opinion that students of the digital era seem to be independent, more technologically disciplined, savvy and tend to compliment the cyberspace efficiently.

According to Joshua Stern (n.d), Online learning is education that takes place over the internet. It is often referred to as "e – learning" among other terms. He also described the term as "distance learning" – the umbrella term for any learning that takes place across distance and not in a traditional classroom.

Perception simply means the various ways by which different individuals perceive, understand and interpret a particular message disseminated through any communication medium or channel. This concept of perception was explained by Ukaegbu (2018) while defining the "Perception Theory", to be the different reaction to mass media messages by different people. He stated that the receivers of mass media messages ought to interpret the messages in line with their individual perception patterns. People's perceptions of their environment are equally determined by the level of influence from their belief systems, needs, values, wants, attitudes, behaviour and other psychological factors. Another definition of perception is that it is the processing, interpreting, selecting, and organizing of information. Perception's effect on the communication process is all about how the same message can be interpreted differently by different people (Lombardo, 2020).

A survey "... is one of the most popular methods used today to gain knowledge of things, peoples and events in the natural world. This design involves the study of a sample taken from a population in order to know their major characteristics which can be generalized to the whole population" (Ihejirika & Omego, 2013, p. 73).

Another definition of a survey, is that it "...is a research method used for collecting data from a predefined group of respondents to gain information and insights into various topics of interest". (Bhat, 2020, p.1). According to the blog, the data is usually obtained through the use of standardized procedures to ensure that each respondent can answer the questions at a level playing field, to avoid biased opinions that could influence the outcome of the research. This process, according to them, involves asking people for information through a questionnaire, which can be either online or offline.

This concept of the Internet has been defined by Ndimele & Innocent (2016, p. 287-288) as "a network of computers which are electronically linked to one big (mega) computer for the purposes of sharing information...". They stated that the computers must speak one language, and such language is known as Transmission Control Protocol/Internet Protocol (TCP/IP). "The Internet is a globally connected network system facilitating worldwide communication and access to data resources through a vast collection of private, public, business, academic and government networks" (Techopedia, 2020). According to the blog, the terms "internet" and "World Wide Web" (WWW) are often used interchangeably, but they are not exactly the same thing, as the internet refers to the global communication system,

which includes hardware and infrastructure, while the web is one of the services communicated over the internet.

Bender (2020, p. 1), defined the concept "covid-19" as "a disease caused by a new strain of coronavirus". 'CO' stands for corona, 'VI' for virus and 'D' for disease". She went further to state that the symptoms include; fever, cough and shortness of breath. Pneumonia or breathing difficulties are symptoms in more severe cases caused by infections.

The disease is passed/transmitted through touching surfaces contaminated with the virus and touching one's face (e.g. nose, mouth, eyes) thereafter, and is airborne. Transmission and contamination can be prevented by wearing face masks, using hand sanitizers, avoiding crowded places and maintaining other hygiene protocols.

Empirical Review

In a study by Agarwal & Kaushik (2020), on "The Perceptions of Indian Medical Students on Online Learning During Covid-19 Pandemic", they revealed that the most frequent factors that hindered learning were; limited number of participants on the platform, limitation on the time sessions and technical faults during the conduct of sessions. A study by Azhari and Kurniawat; (2021), revealed that the challenges faced with online learning are; less satisfactory perception on online learning due to in-activity of the process for maximum outcomes as it relates to questions about clarity of delivery by the lecturers and students' ability in task accomplishment from the lecturers. In a comparative statement, students expressed their preferences for classroom teaching over online teaching due to the reason being that the classroom process contributed greatly to learning outcomes, and its visual attributes in teaching and learning contributed to students' learning and retention.

Dost, et al. (2020), in their study on "Medical Students' Perceptions on Online Teaching in London, UK", reported that the students did not find online teaching to be engaging or enjoyable as compared to physical class teaching. They also experienced lack of motivation, difficulty concentrating and asking questions and a lack of contact with colleagues as further challenges. There were also inconsistencies with under developed medical curricula, as many teachers were inadequately prepared and there was also the factor of technical difficulties. This implies that the unexpected sudden introduction of online teaching met both students and staff unprepared, and therefore, they struggled to get a good hang of it, which did not come without compromises in quality education.

Baczek, et al. (2021), carried out a study on "Students' Perception of Online Learning During the Covid-19 Pandemic: A Survey of Polish Medical Students". They conducted the research in Poland, after eight weeks of online learning with no face-to-face learning. The study analysed medical students' perception of online teaching approach in the face of the global epidemic emergency. There was no clear-cut objective of the study, but its purpose was obviously to investigate the perception of medical schools' students on online learning in Poland.

The researchers found that the respondents in their survey assessed that they were less active during e-learning than during traditional classes. It was speculated that one of the reasons could have been lack of an interactive approach when developing e-learning courses. According to their research, only 4% of the respondents chose class interactivity as an advantage of e-learning during covid-19 pandemic. Various ways of boosting the interactivity of online learning were identified as gamification, in which game design elements are used in non-game contexts. Another approach which was identified, was the social and collaborative learning, which allows students to socially interact with each other, as well as instructors. This

method allows both parties to work together to share ideas and expand their knowledge in an open forum. The researchers also made mention of another technique known as branching scenarios, in which students get the opportunity to test their skills in a practical setting. In this form of learning, the students would be required to make a decision and equally present the consequences. This technique is associated with higher learning outcomes, mostly regarding increasing knowledge and clinical reasoning.

Musthuprasad, et al. (2020), investigated "Students' Perception and Preference for Online Education in India During Covid-19 Pandemic", and centred its focus on the perception of agricultural students' perception and preference towards online learning and it was carried out in India, New Delhi, during the corona virus global pandemic lockdown. The findings of this study indicated that majority of the students evinced a positive attitude towards online classes in the wake of covid-19. The online learning was found to be advantageous as it provided flexibility and convenience for the learners. Students preferred well structured content with recorded videos uploaded in university websites. They also indicated the need for interactive sessions with quizzes and assignments at the end of each class to optimize the learning experience. However, most students also reported that online classes could be more challenging than traditional classroom, due to the technological constraints, delayed feedback and inability of the instructor to effectively handle the information and communication technologies.

The primary purpose of this study was to examine the preference and perception of students regarding the online classes. Majority of the respondents preferred online classes to cope with the curriculum due to the lockdown in the wake of covid-19 pandemic, whereas 30% of the respondents suggested suspending the classes or providing reading materials till the lockdown was lifted.

Theoretical Framework

This study adopted three theories, namely; the Selective Influence Theory – Selective Perception, the Cognitive Dissonance Theory and the Development Media Theory.

The selective influence theory was propounded by Joseph T. Klapper in the early 1960s, and it postulates that individuals actively select what media contents to expose themselves to and deliberately or subconsciously avoid those media contents that disagree with their already preconceived ideas, values, beliefs, opinions, attitudes, etc. The students of IAUE expose themselves to media contents that appeal to their prevailing beliefs and values, tendencies are that they will each have different opinions and perceptions of the online teaching and learning, due to their peculiar environments and psychographics. In other words, the peculiar environments and prevailing ideas and interests of IAUE students would shape their perceptions of online teaching and learning during the covid-19 lockdown.

The cognitive dissonance theory was propounded by Leon Festinger in 1957, and it postulates that the media merely reinforce the prevailing opinions, beliefs, values and interests of the mass media audience, rather than converting them. The students of IAUE would have their opinions and perceptions of online teaching and learning based on whatever preconceived interests and values they have concerning the topic under discussion. In other words, their perceptions on the topic would either be negative or positive, depending on their already prevailing opinions and thought patterns.

The development media theory was propounded by Dennis McQuail in 1987. Ukaegbu (2018, p. 156) states that "the major thrust of development media theory is based on the use of the media to support national development". The federal government of Nigeria gave directives through the mass media, that all universities and polytechnics should resume their lectures online. Therefore, it happened that IAUE started online – teaching and learning as a

new educational development. This new development of education, if sustained, would help transform the educational sector in the third world countries into a blended system of teaching and learning.

METHODOLOGY

The study adopted a descriptive survey design, with a population size of 23, 907 undergraduate students of IAUE on the main campus. The Taro Yamene's formula was used to calculate the sample size, which came up to 392. Randomization was done via a stratified random sampling technique. The nature of data collection was both primary data; the consultation of textbooks, online articles and journals, and secondary data; the use of the questionnaire, which consisted of two sections - the demographics of the students of IAUE and a Likert scale that measured their responses from strongly agree to strongly disagree. The method of data analysis was conducted through means, standard deviations and frequency tables. A test-retest method of reliability was applied, and the scores were then subjected to Cronbach Alpha technique and the reliability index of .73 was obtained.

Results and Findings

Table 1: Demographic Data of Students

Characteristics of Respondents	Frequency (%)	
Faculty:		
Business Studies	58	15%
Social Sciences	84	21%
Humanities	64	16%
Natural and Applied Sciences	58	15%
Vocational and Technical Education	56	15%
Education	72	18%
Year Level:		
100 Level	89	23%
200 Level	117	30%
300 Level	98	25%
400 Level	88	22%
Gender:		
Male	185	47%
Female	207	53%
Parent's Marital Status:		
Married	188	48%
Unmarried	204	52%
Parents' Socio-economic Status:		
University Graduate and Working	145	37%
Non-University Graduate and Private Enterprise	125	32%
Trade	122	31%
Craftsman	0	0%
Peasant Farmer	0	0%

Gadgets that were used for online classes:		
Desktop	85	22%
Laptop	97	25%
Tablet	87	22%
Smartphone(s)	123	31%
Channel(s) that was/were used for online Classes:		
WhatsApp	156	30%
Zoom	124	32%
YouTube	112	28%
Skype	0	0%
Teacher Tube	0	0%
Other	0	0%
Channel(s) that was /were effective for online classes:		
WhatsApp	96	24%
Zoom	64	17%
YouTube	64	17%
Skype	56	14%
Teacher Tube	56	14%
Other (Telegram)	56	14%

Table 2: IAUE students' perceptions of online teaching and learning, based on the negativity or positivity.

S/N	ITEMS	N	$\bar{x}$	SD	RMKS
1.	Being computer literate is positive	392	2.67	0.41	Agree
2.	The ability to use the platform(s) for online classes without any supervision or guidance is negative	392	2.57	0.26	Agree
3.	Staying active on the internet for up to two hours is positive.	392	2.57	0.26	Agree
4.	The operations of computers, smartphones and tablets as being highly educative is negative.	392	2.48	0.14	Disagree
5.	The innovation of online teaching and learning as the new medium of education is positive		2.60	0.31	Agree
	Grand mean=			2.57	
	Criterion mean=				2.50

The above table reveals that the total responses to four of the items were above the criterion mean, indicating that the students agreed to the item statements; 1, 2, 3, and 5.

Table 3: Reasons for the perceptions of IAUE students on online teaching and learning.

S/N	ITEMS	N	$\bar{x}$	SD	RMKS
1.	You believe that the internet and social media platforms are not necessary for online classes.	392	2.50	0	Agree
2.	You believe that the online classes during the lockdown increased social isolation and depression.	392	2.56	0.24	Agree
3.	You have never liked interacting on social media platforms.	392	2.44	0.24	Disagree
4.	You lacked adequate funds to finance your data subscription and purchase of gadgets.	392	2.60	0.31	Agree
5.	Your experience of internet connection was very poor	392	2.57	0.26	Agree
Grand mean=				2.53	
Criterion mean=					2.50

The above table reveals that the total responses to four of the items were from the criterion mean and above, indicating that the students agreed to the item statements; 1, 2, 4 and 5.

Table 4: Factors that shape the perceptions of IAUE students on online teaching and learning.

S/N	ITEMS	N	$\bar{x}$	SD	RMKS
1.	Your religion places restrictions on the use of the internet and digital media, due to unforeseen distractions and temptations.	392	2.53	0.17	Agree
2.	You consider yourself to be computer literate and have a good knowledge and skills on technology.	392	3.04	0.73	Agree
3.	The economic status of your parents and guardians are high enough to sponsor your education and every other requirements for participating in the online classes.	392	2.55	0.22	Agree
4.	You have ownership of the appropriate gadgets, smartphones, laptops, and tablets, necessary for the online classes.	392	2.57	0.26	Agree
5.	The platform(s) was/were unsuitable to some teachings and learning methods.		2.58	0.28	Agree
Grand mean=				2.65	
Criterion mean=					2.50

The table above reveals that the total responses to the five items were above the criterion mean, indicating that the students agreed to the item statements; 1, 2, 3, 4 and 5.

Table 5: Perceptions of IAUE students on online teaching and learning, based on the effectiveness of the platform(s) used.

S/N	ITEMS	N	$\bar{x}$	SD	RMKS
1.	The platform(s) was/were able to host up to 100 participants and above in a video conference call.	392	2.54	0.2	Agree
2.	The platform(s) was/were able to host up to 100 participants in an audio-conference call.	392	2.55	0.22	Agree
3.	There was an excellent network connection.	392	2.48	0.14	Disagree
4.	The audio/video quality and clarity was excellent.	392	2.53	0.17	Agree
5.	The platform(s)' tools for teaching and learning was effective.	392	2.52	0.14	Agree
	Grand mean=			2.52	
	Criterion mean=				2.50

The table above reveals that the total responses to four of the items were above the criterion mean, indicating that the students agreed to the item statements; 1, 2, 4, and 5.

Table 6: IAUE students' perceptions of online teaching and learning, based on the factors that hinder a smooth digital classroom experience.

S/N	ITEMS	N	$\bar{x}$	SD	RMKS
1.	Unavailability of funds to finance the acquisition of the appropriate gadgets and internet subscription for online classes.	392	2.62	0.34	Agree
2.	There was poor network connection.	392	2.58	0.28	Agree
3.	The environment in which you participated, in the online classes was noisy.	392	2.50	0	Agree
4.	You cannot stare at the computers, smartphone's, or tablet's screen for a long time.	392	2.54	0.2	Agree
5.	There was lack of power/electricity supply, and it affected your online class-room experience terribly.	392	2.59	0.3	Agree
	Grand mean=			2.56	
	Criterion mean=				2.50

The above table reveals that the total responses to the five items were from the criterion mean and above, indicating that the students agreed to the item statements; 1, 2, 3, 4, and 5.

Discussion of Findings

The responses of the students of IAUE concerning the positivity and negativity of online education suggested that online teaching and learning is accepted by the school as the new medium of education, and that they find the operations of technology and the internet to be highly educative. They also responded positively to the idea of being a computer literate, and also admitted to being knowledgeable and skilful in the operations of digital media. The findings agree with the Development media theory which postulates that the media is used to support national development. As it regards the education system, the use of digital media for online classes helped to sustain education during the covid-19 lockdown, and from the

responses of the students, online teaching and learning mixed with face-to-face learning would be a better method of learning in this digital era.

The reasons for the perceptions of the students were that; the students believed that the internet and social media platforms were not necessary for online classes, they believed that online classes during the lockdown increased social isolation, they lacked adequate funds to finance their data subscription and purchase of gadgets and their experience of internet connection was very poor. The findings from the literatures agree with the Selective influence theory –selective perception. This theory relates to the above literatures in the sense that, the students from the different studies had differing opinions due to their peculiar environments, their economic and social backgrounds, as well as their psychographics.

The factors that shaped the perceptions of the students on online teaching were, religion, computer literacy / technological savviness, the economic status of their parents, their ability to acquire the appropriate gadgets and the unsuitability of the platforms that were used for the online classes. The findings of the study is in line with the Cognitive Dissonance Theory. Due to the already prevailing thought patterns, ideas and belief systems of the students, their perceptions on online teaching and learning were formed.

The students perceived the effectiveness of the platforms used for online classes as follows; the platforms were able to host up to 100 participants for both video and audio conference calls, there were terrible network connections, the audio / video quality were excellent, and the platforms' tools for online classes were effective. The Development media theory can be related to the findings here, in the sense that if more effort was made by the government or school authorities to ensure free and accessible Wi-Fi for the students, especially in the rural communities, there would be a better experience in online classes, and the platforms used would be more effective in this regard.

The students' responses to the factors than hinder a smooth digital classroom experience are; unavailability of funds to finance the whole process of participating in online classes, poor network connection, noisy environment, inability to stare at the digital screen for too long, lack of power / electricity supply. These findings support the Selective Influence Theory. As different as the environmental, economical, and psychographic nature of the students are, so are their perceptions and opinions of the challenges of online teaching and learning. Also, the Development media theory is supported by the findings, in the sense that, when the media are used to foster development in the society, especially in the rural areas, things like power / electricity supply would not be an issue in online classes.

CONCLUSION

Online teaching and learning was the new medium of education, and proved to be useful in the continuation of education, despite the 2020 covid-19 lockdowns. The perceptions of the students of IAUE indicated that online education is positive, despite the challenges faced with it. This is in line with the Development Media Theory, whereby technology / digital media were employed to ensure the improvement and sustainability of the education system during 2020 covid-19 lockdown.

The reasons for the perceptions of IAUE students on online teaching and learning is based on factors like; increased depression and social isolation, lack of funds, poor network connection and personal inclinations towards the digital space. The Selective influence theory – selective perception, supports these findings, due to the fact that the perceptions of the students were shaped by their various psychographic, economic and environmental backgrounds, as well and their inherent beliefs, values and interests.

The factors that shape the perceptions of IAUE students on online teaching and learning are based on; their religion their technological savviness, skills and knowledge of ICT,

the economic status of their parents and guardians, their ownership of gadgets, and the suitability of the platform(s) used to some teachings and learning methods. This can be related to the Cognitive Dissonance Theory, in the sense that the students had their perceptions on the subject matter as a result of their already prevailing ideas, thought patterns and opinions (which were merely reinforced) of online education, technology and the digital media.

The perceptions of IAUE students, based on the effectiveness of the platform(s) used, showed that both video and audio calls could host up to 100 participants, the network connection was bad, the quality of both audio and video was great and the platform(s) tools were really effective. The findings here are in line with the Development media theory, as there would be a better experience of online classes when issues like network / internet connectivity are fixed.

The perceptions of IAUE students on online teaching and learning revealed that there was lack of funds to finance the acquisition of the appropriate gadgets and internet data subscription, there was poor network connection, the environment they participated from was noisy, they could not stare at the screen for long and there was lack of electricity supply. These were the factors that hindered a smooth digital classroom experience. The selective influence theory can be related to these findings in terms of the different economic, psychographic and demographic background of the students, which shaped their perceptions towards online teaching and learning. The Development media theory can also be related to these findings, in the sense that when power / electricity issues are fixed, there would be a better online class experience for both students and lecturers.

RECOMMENDATIONS

Students should be given the room or opportunity to air their suggestions for improvement on the online teaching/learning experience.

Students should be more cooperative with the school authorities with regard to the online teaching/learning.

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