University Students' Perceptions on Emergency Remote Learning during the COVID-19 Pandemic

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Abstract

During the COVID-19 induced lockdown, many universities turned to technology to promote continued academic engagement with students remotely. The study sought to elicit Olabisi Onabanjo university students' perceptions of the university's emergency remote learning intervention. To ascertain students' access to technology, the perceptions of the impact of the emergency remote learning on their engagement with lecturers and course content, and their overall well-being. It also sought to understand their views on the benefits and drawbacks of remote learning. Most students indicated that they lacked the necessary technologies for remote learning. Students reported more self-directed learning, no significant increase in effort, but lower well-being scores during the school closure. Students identify convenience as a significant benefit of remote learning, but network and power supply difficulties are identified as significant challenges. According to the study's conclusions, policy guidelines should include student digital access, workload restrictions, children's safety and well-being in the event of a school lockdown.

Keywords: Higher Education, Remote Learning, Students' perception, School lockdown, COVID-19

Introduction

With the spread of coronavirus infection (COVID-19) around the world, educational institutions came to a halt, and many countries, including Nigeria, decided to close down of all educational institutes. The COVID-19 pandemic forced governments to close schools for an extended period, necessitating the suspension of academic activities on many higher education campuses around the world, as they needed to protect their students from viral exposure due to the high level of socialization within student communities. Because of the indefinite closure of schools, many educational institutions began experimenting with ways to complete their school year within the given timeframe specified by the academic calendar.

At this time, majority of the universities went online, offering remote learning to their students through Blackboard, Google meets, Microsoft Teams, Zoom, or other online platforms. (Muthuprasad et al, 2021). This they did through remote learning. Remote learning is a strategic, measured approach to ensuring that student's needs are met as best as possible when a school closure is necessary (Hodges et al., 2020). It is a system in which students learn, interact with other students and teachers, share resources, and track academic progress using internet-based technologies. Although Hodges et al., (2020) define what most institutions embarked on as "Emergency Remote Teaching (ERT), which is a temporary shift of instructional delivery to an alternate delivery mode due to crisis circumstances" stating that Online learning experiences that are well-planned are qualitatively different from those that are delivered in response to a crisis. Furthermore, the global spread of the COVID-19 pandemic has increased the importance of online classes. According to Bignoux and Sund (2018), there is a

significant difference between the online learning environment and the traditional classroom situation, with regards to learner's motivation, satisfaction, and interaction. Thus, while educational institutions seek workarounds solutions to the continuity of teaching and learning, it is important to note that the learning quality desired is dependent on the level of digital access and efficiency, among other factors.

Educational research on the learning experience of students has always been a priority (Cranfield et al, 2021). Qualitative and quantitative research studies relating to the impact of COVID -19 with specific reference to the students 'online learning experience that date way back to May 2020, began to be published from both developing and developed countries.   These studies looked at a variety of topics, including student learning outcomes (Aminuddin, 2021), student motivation and engagement, the importance of attitude (Ferrer et al, 2020), and learning platforms and related challenges (Al-Kumaim et al., 2021). Several case studies were carried out (Gelles et al., 2020; Balderas & Caballero-Hernández, 2020). The majority of recent studies have focused on children and adolescents' experiences during the early pandemic, but only a small number of them are directly related to well-being in digital learning settings (Balica, 2021).   Martinho et al. (2021) investigated students' perceptions of the impact of the pandemic and the university lockdown on their learning experiences, but this was from the lecturers' point of view, not that of the students'. Muthuprasad et al., (2021) argues that considering learners' preferences and perceptions is critical if online courses are to be designed to make learning effective and productive. Based on all these reviews, it was determined that there is a need for research into students' perception of remote learning, particularly in universities in developing countries such as Nigeria. The Olabisi Onabanjo University, Ago-Iwoye, a public state-owned university in Nigeria, adopted remote teaching and learning using Microsoft Teams to ensure academic continuity while ensuring the safety of the university community as most universities were affected by the school closure due to the COVID-19 pandemic. All lectures moved online via the Microsoft Teams platform, which enabled synchronous and Asynchronous engagements between staff and students, through live class sessions, chats, document sharing, and learning assessments.

The transition from traditional on-campus lectures to remote learning was abrupt, and the students lacked prior university experience with online learning while universities may also not have prepared fully in terms of the provision of the facilities required for remote learning. As the university continues to engage students through online learning, it is critical to gain insight into what worked and what did not. The purpose of this study was to elicit students' perceptions of remote teaching and learning during the COVID -19 school lockdown, in the bid to gain insight into the students' experiences of remote learning. This study would assist university administration and lecturers in reflecting on their practices, identifying and providing evidence for the implementation of policies that would be required for planning future online engagements and any other emergencies that may require school lockdown, such as the current COVID-19 variant threats.

Research Questions

The following research questions were posed as guide to the study

1) What is the level of access that students have to technology for remote learning?

2) What is the general level of satisfaction among students with their remote learning experience?

3) What are the perceived challenges that students face while participating in remote learning?

4) What are the students' perspectives on the changes in teaching and learning?

Literature Review

Empirical reports on students' perception of remote learning have been on the rise recently (Biswas, Roy & Roy 2020). Reports have shown that most of the students who engaged in remote learning are satisfied with the instructional method, yet other studies are showing that students' perceptions were influenced by many characteristics including age, gender, prior computer literacy, and individual students' learning preferences, among others (Pérez-Pérez, Serrano-Bedia, & García-Piqueres, 2020). Owusu-Fordjour *et. al.,* (2020) reported that the sudden transition to emergency remote learning brought about some dissatisfaction and resistance because students' transitioning to ERT reported negative experiences because of complaints about a lack of motivation and inability to effectively interact with peers and educators.

The studies of Mollenkopf et al., (2020), Turner et al., (2020), and Hussein et al., (2020), reported some challenges that students encountered during emergency remote learning. Students not only had to try to focus on their academics, but they also had to deal with other issues such as juggling home chores, lack of actual study space unlike when on campus, and distractions such as pets and other family members going about their daily lives, to name a few. Paying attention during online learning was another difficulty for some students, for *many students*, having *classes online* makes them easily distracted. Turner *et al.* (2020) reported further that the front stage of the classroom collided with the backstage of people's homes. Students have some level of positive perceptions toward emergency remote learning, yet they encountered some challenges during that sudden period of online learning. The major challenges, according to the findings are technical problems, distractions from other people at home, lack of the level of ICT skills needed for online learning, poor Internet connectivity, and excessive workload for students of online learning.

With regards to students' level of satisfaction with emergency remote learning, Tratnik et al. (2019) reported a significant difference where the report showed more interest by students in the traditional mode of learning. Aa also reported by Yamin (2020), citing also the traditional physical classroom mode of instruction was preferred by most students as against the online learning mode. Noting that the conversion of a course from the traditional face-to-face mode of delivery to an online mode appeared to lower students' satisfaction. According to Kemp and Grieve (2014)

report, university students choose to complete coursework in the traditional physical manner rather than learning online. (Kemp & Grieve 2014). In a study by Ba˛czek et al. (2021) eight weeks after switching to online learning, a survey was undertaken to find out how Polish medical students perceived their online experience. The study respondents cited a lack of interactions with patients, technological difficulties, fewer interactions with the teacher, a lack of self-discipline, and social isolation as the main drawbacks of online learning. Similarly, because of the lack of the necessary communication networks and devices to follow online learning, students in remote places found that it was less effective than the face-to-face instruction (Harefa, et al. 2021).

The ability to foster critical thinking, information processing, engagement with lecturers, consistency in course design, and efficacy of instructor interaction are some of the factors that have an impact on how student would perceive emergency remote learning. (Picciano, 2002). Other factors cited that impacts on students perception of remote learning include, the level of interaction in an online learning environment (Arbaugh, 2000), flexibility in online learning (McCall, 2002), the ability to engage with the instructor and peers in online learning environments (Kim et al. 2005), academic self-concept (Lim et al. 2007), and technology use competencies.

Students did not view the online and traditional modalities of instruction to be similar, according to Platt, Raile, and Yu (2014) study. However, when students' use of the online learning mode and experience grew, it was discovered that their impression of equivalency was positively correlated. (Platt et al. 2014 However, if planned properly, emergency remote learning via online platforms could be as beneficial as traditional classrooms.

Methodology

At the end of the emergency remote learning academic semester embarked on by the Olabisi Onabanjo University, Ago-Iwoye, a survey was conducted to elicit students' perceptions of their remote learning experiences during the semester. The aim of this research was to ascertain their perceptions of remote learning's impact on their engagement with teachers, engagement with course content, and overall well-being. Additionally, the survey inquired about their access to technology, their perceptions of the benefits of remote learning, and the difficulties they encountered while participating in remote learning.

The questionnaire was created using Microsoft Forms and distributed to students via the university's Microsoft Teams account in order to elicit information about their remote learning experiences and was open to those who were willing to volunteer to participate in the survey. This survey was completed by a sample of approximately 581 students at the 300 level (students in their third year of study at the university) from the faculty of education's five departments. This represents about 76% of the total population of students at that level. The questionnaires were completed by the respondents under anonymity while those are not interested were allowed to opt out. The questionnaire was divided into three sections: a Yes or No section that examined students' access to technology and Internet services; and a 5-point Likert scale with response ranges ranging from strongly agree to strongly disagree that elicited student responses about their experiences during the remote learning semester in terms of changes in

teaching and learning. Additionally, open-ended questions were used to elicit students' perceptions of the benefits and drawbacks of remote learning, as well as the challenges they encountered as a result of going online. The questionnaire was perused by colleagues, minor observations were made and it was ascertained to have a face and content validity. The questionnaire was further subjected to a reliability test using Cronbach alpha which produced a 0.87 reliability coefficient.

The gathered data were analyzed using descriptive statistics. The descriptive analysis was used to investigate students' demographics and perceptions of the impact of remote learning on their academic experiences. The combination of quantitative and qualitative analysis enables a more nuanced understanding of students' experiences during the lockdown semesters of COVID -19.

Findings

Table 1: Level of students' access to Technology for remote learning?

S/N	Question	Yes (%)	No (%)	Maybe (%)	Total (%)
1	Do you have access to a computer that meets your requirements and enables you to do your academic work and engage in remote learning?	29%	62%	10%	100%
2	Do you have an uninterrupted, reliable internet connection at home that enables you to engage in remote learning and complete your projects on time?	16%	65%	19%	100%

Table 1 shows the extent to which students have access to technology for remote learning. According to the data analysis, 62 percent of the population of students in this study do not have access to a computer that meets the requirements in terms of effectively participating in remote learning, and only 29 percent reported having a computer system that is adequate for use in remote learning, and 10 percent were undecided. Meanwhile, 65 percent of students reported that they did not have a reliable internet connection at home to enable them engage in remote learning and complete your projects on time. This demonstrates that students' access to technology for remote learning is extremely limited.

Table 2: Students' general satisfaction level with their remote learning experience

Rating Scale	Number of Respondents	Percentage
Least Satisfied (1-3)	256	44%
Satisfied (4-6)	168	29%
Very Satisfied (7-10)	157	27%

Total	581	100%

According to Table 2, the vast majority of students (44%), are dissatisfied with their remote learning experience, while 29% disagree and 27% are very satisfied. According to this finding, 56% of students expressed some level of satisfaction, demonstrating that they had some level of satisfaction with their online learning experience. This result is in line with Aminuddin (2021) findings regarding Afghan students' satisfaction with online learning during the COVID-19 Lockdown. The study discovered that at the time those students were dissatisfied with online learning.

Table 3: Students perceived challenges to remote learning?

Responses Collation	Number of Respondents	Percentage
Network Issues	283	53%
Data Subscription and Electricity	108	20%
Lack of Concentration	82	15%
Inefficient Teaching Method	63	12%
Total	536	100%

From table 3, two hundred and eighty-three (283) of the students representing 53% had network issues during remote learning, one hundred and eight (108) representing (20%) had challenges with data subscription and electricity issues, eighty-two (82) representing (15%) are unable to concentrate during online class while sixty-three (63) representing (12%) complained of inefficient teaching methods as challenges faced during remote learning. As a result of the findings, it is clear that the vast majority of students identified insecurity with network services and epileptic power supply as the major challenges they faced during remote learning, while only a small percentage of students had issues with the lecturers' teaching methods used during the remote engagement. From the table, two hundred and eighty-three (283) of the students representing 53% had network issues during remote learning, one hundred and eight (108) representing (20%) had challenges with data subscription and electricity issues, eighty-two (82) representing (15%) are unable to concentrate during online class while sixty-three (63) representing (12%) complained of inefficient teaching methods as challenges faced during remote learning. As a result of the findings, it is clear that the vast majority of students identified instability with network services and epileptic power supply as the major challenges they faced during remote learning, while only a small percentage of students had issues with the lecturers' teaching methods used during the remote engagement.

Table 4: Students' perception as regards the changes in teaching and learning

Questions	SA	A	D	SD	NA/D	Mean	Remark

As a result, I can work at my own pace.	187	193	62	75	64	3.65	SA
I enjoy planning my daily schedule for schoolwork,	269	149	39	52	72	3.87	SA
I feel I am learning more than I do in school	78	81	104	258	60	3.02	SA
It's challenging to keep school and home separate	230	152	51	72	76	3.70	SA
I also miss participating in extracurricular activities and sports	225	112	51	118	75	3.62	SA
I believe that I am not learning as much as I could be in a traditional classroom setting.	311	112	45	85	28	4.09	SA
Teachers are assigning too much homework now	71	86	108	182	134	2.75	A
I really need class discussions to learn	370	108	22	50	31	4.31	SA

The mean value of the items in Table 4 is greater than 2.50, indicating positive students' perceptions of changes in teaching and learning based on the various criteria and perceptions listed above. Although, students indicated a greater proclivity for self-direction, evidenced by the majority agreeing to the statement 'I enjoy creating my daily schedule for schoolwork.' There was also a perceived increase in distractions at home in comparison to what occurs in a physical classroom, and thus a sense that they were not learning as much as they would have in a physical classroom. The vast majority (478) of respondents agreed that classroom discussion is critical for learning.

Qualitative Findings

The descriptive analysis findings were consistent with the students' perceptions as given in the open-ended question. The respondents provided qualitative responses including both positive and negative comments about their experiences with remote learning during the COVID-19 school lockdown for some of the issues raised.

Students were required to provide information about their learning situation in terms of access to devices and internet connectivity. Only a small percentage of students reported having access to devices for remote learning engagements, while the majority of students reported otherwise. Excerpt from the study is as shown below:

"..... I don't have a good phone so I hardly connect.". (Student No 38)

The majority of students inferred that the lack of internet connectivity and data subscription was related to the students' low-class attendance and engagement. Excerpts from the study are shown below:

"It consumes an excessive amount of data."(student No 63)

"Though remote learning is beneficial, it is limited by data usage, poor electricity, and a poor network."(Student No 106).

.. They are not encouraging at all, and this causes me to miss a lot of class."(Student No 308)

Despite the challenges mentioned above, it is encouraging to see that many respondents reported positive experiences with remote learning. Excerpt from the study is as shown below:

"I am privileged to be a part of this program. The ways I have improved, I now answer questions in class which before wasn't possible because I have severe stage fright and I am really shy..."(Student No 77)

"Remote learning has been favourable for me; it allows me to join classes in my comfort zone which allows me to learn a lot better than physical class" (Student No 490)

However, some students expressed difficulty in remote learning and as a result could not gain much knowledge. Excerpts are as follows:

'It makes learning so difficult for me because I am a slow learner who prefers face-to-face discussions or learning over online, (Student No 312).

In terms of workload, some students reported an increase in schoolwork. Students' responses to active engagement with their courses, on the other hand, were more varied; some students responded negatively in response to active engagement with their courses. Excerpts are as follows

"It's not working for me; I'm falling far behind." (Student No 338)

"Please, I can't keep up with this online class; I can't even get to write notes ..." (Student No 310)

While some students had a more positive experience than others:

"I learned a lot" (Student No 211)

"I am now completing my assignments independently, rather than relying on my colleagues..."(Student No 432)

The findings indicating a decline in student well-being could be attributed to a perceived inability of students to balance home and school demands during remote learning. While this was not the case for all students, according to the response: 'It has helped me learn how to manage family and school work,' many students were unable to manage both; *"... It's also difficult to balance housework and schoolwork. It's been extremely stressful and difficult."* (Students No 64) "At home, there are numerous distractions, and household chores and errands do not always permit complete concentration."

One of the major difficulties students perceived during remote learning was ineffective teaching methods. Concerning the lecturers' teaching methods, one student stated, *"The biggest challenge is that it is not interactive,"* while another stated, *"I am having difficulty understanding courses that require calculation and practical." It is not feasible for mathematics courses." (Student No 64)*

Given the abrupt transition to remote learning, it's unsurprising that many students expressed an eagerness to return to the University Campus. *"We'd love to resume physical lectures soon,"* students stated, *"Because the learning environment is critical to learning, I'd prefer to return to school, and face-to-face learning motivates me to study more." (Students No 44)*

Additionally, the students recommended that the following actions be taken:

"I believe that classes should not exceed one hour in length due to the nature of our data." (Students No 85)

"Intervals between classes should be reduced or physical classes should be reinstated". (Student No 288)

Discussion and Conclusion

In summary, we discovered a few factors that influenced students' experiences and engagements during the university's remote teaching and learning intervention, which was prompted by the COVID-19 school lockdown. This study's findings point to a clear recommendation for the development of a contingency plan in the event of future shutdowns, as many of the research insights presented here will be relevant far beyond the current situation.

According to the finding of research question one, a larger percentage of students do not have access to a computer that meets the requirements in terms of effectively participating in remote learning, only 29 percent reported having a computer system that is adequate for use in remote learning, and 10 percent were undecided. Meanwhile, 65 percent of students reported that they did not have a reliable internet connection at home to enable them engage in remote learning and complete your projects on time. This demonstrates that students' access to technology for remote learning is extremely limited.

The study found that two hundred and eighty-three (283) of the students representing 53% had network issues during remote learning, one hundred and eight (108) representing (20%) had challenges with data subscription and electricity issues, eighty-two (82) representing (15%) are unable to concentrate during online class while sixty-three (63) representing (12%) complained of inefficient teaching methods as challenges faced during remote learning. From the findings, it is clear that the vast majority of students identified insecurity with network services and epileptic power supply as the major challenges they faced during remote learning, while only a small percentage of students had issues with the lecturers' teaching methods used during the remote engagement. From the table, two hundred and eighty-three (283) of the students representing 53% had network issues during remote learning, one hundred and eight (108) representing (20%) had challenges with data subscription and electricity issues, eighty-two (82) representing (15%) are unable to concentrate during online class while sixty-three (63) representing (12%) complained of inefficient teaching methods as challenges faced during remote learning.

The study also reported, based on research question two, that majority of students (44%), are dissatisfied with their remote learning experience, while 56% of students expressed some level of satisfaction, indicating that in some ways they had some sense of satisfaction with their remote learning experience. This finding is consistent with Aminuddin H's (2021) findings regarding Afghan students' level of satisfaction with online instruction during the COVID-19 lockdown. The findings at the time of the study revealed students' dissatisfaction with online instruction.

The result of research question three showed that the majority of students identified instability with network services and epileptic power supply as the major challenges they faced during remote learning, while only a small percentage of students had issues with the lecturers' teaching methods used during the remote engagement. The findings of

Mollenkopf et al., (2020), Turner et al., (2020), and Hussein et al., (2020), reported the same challenges that students encountered during emergency remote learning. Also, students not only had to try to focus on their academics, but they also had to deal with other issues which included juggling of home chores, lack of actual study space unlike when on campus, lack of ICT gadgets for study, and to name a few. Paying attention during online learning was another difficulty for some students, for many students, having classes online makes them easily distracted.

Based on research question four, concerning students' level of satisfaction in emergency remote learning, A considerable difference was reported by Tratnik et al. (2019). In this instance, students showed a greater interest in traditional learning methods. Furthermore, according to Yamin (2020), the majority of students favor traditional classroom instruction over online learning. Students' satisfaction seems to decrease when a course is switched from the conventional face-to-face mode of delivery to an online mode. According to Kemp and Grieve (2014), university students prefer to complete their academic tasks in the traditional physical manner as opposed to learning online.

Although students indicated a greater proclivity for self-direction, there was a perceived increase in distractions at home in comparison to what occurs in a physical classroom, and thus a sense that they were not learning as much as they would have in a physical classroom. The majority of respondents agreed that classroom discussion is critical for learning. This is not in line with the report of Biswas, Roy, and Roy (2020) that most of the students who engaged in remote learning are satisfied with the instructional method, yet other research demonstrates that a variety of variables, including age, gender, prior computer proficiency, unique student learning styles, and others, impacted students' perceptions (Pérez-Pérez, Serrano-Bedia, & Garca-Piqueres, 2020). Additionally, emergency remote learning calls for students to exercise more self-control than they would in a traditional classroom setting in order to maintain learning engagement, which is essential for learning outcomes (Jung, 2014). According to Owusu-Fordjour et al. (2020), the abrupt switch to emergency remote learning was met with some resistance and dissatisfaction because students making the switch to ERT complained of negative experiences, including a lack of motivation and an inability to communicate with peers and teachers.

As the university continues to engage students through a hybrid teaching-learning approach post-Covid-19, the focus should be on the quality of online experience for the students. Ensuring meaningful student-faculty connection, one that provides the guidance required for learning. And in preparation for an unforeseen need for emergency remote learning, it is recommended that faculty should be given guidance and guidelines regarding appropriate workload expectations for students working from home. A thorough analysis of the impact of various tools and technologies on well-being should be conducted prior to the implementation of remote learning. Also recommended is a well-being contingency plan, such as the university's guidance and counseling center providing online open hours as support for students' mental well-being during school closures. A greater liaison between the

student body and the university when students are learning remotely is suggested, with the goal of having their voices heard.

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