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## **University Students' Perceptions of Curriculum Content Delivery During COVID-19 New Normal in South Africa**

Bunmi Isaiah Omodan<sup>1</sup> & Olugbenga A Ige<sup>1</sup>

1) School of Social Sciences and Language Education, University of the Free State, South Africa.

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# **University Students' Perceptions of Curriculum Content Delivery During COVID-19 New Normal in South Africa**

Bunmi Isaiah Omodan  
*University of the Free State*

Olugbenga A Ige  
*University of the Free State*

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## **Abstract**

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Observation and experience exist among university students during COVID-19 new normal; the quality and the process of academic activities have been compromised. This study, therefore, examines the lacuna on whether the new normal is more productive by ensuring that the intention of the curriculum towards students' content knowledge is met or not. Organisational change theory was used to theorise the study within the transformative paradigm (TP) and participatory Rresearch (PR) lenses as a research design. The study was conducted in one of the universities in South Africa. Ten students were selected using the convenience sampling technique because the students were not fully on campus as of the time of this study. The online interview was adopted to collect data because of social distancing rules across the country. Thematic analysis was used to interpret the data. The findings revealed that the COVID-19 new normal does not affect students' academic performance negatively even though the quality of content delivery is low. The channels of teaching-learning and the Internet of Things are deduced to be unpleasant for the students with recommendations that there is a need to provide the internet-or-things alongside training and retraining for students and lecturers.

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**Keywords:** COVID-19, university classrooms, teaching and learning, organisational change theory, online learning

# **Percepciones de los Estudiantes Universitarios Sobre la Impartición de Contenidos Curriculares Durante la Nueva Normalidad del COVID-19 en Sudáfrica**

Bunmi Isaiah Omodan  
*University of the Free State*

Olugbenga A Ige  
*University of the Free State*

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## **Resumen**

La observación y la experiencia existen entre los estudiantes universitarios durante la nueva normalidad COVID-19; la calidad y el proceso de las actividades académicas se han visto comprometidos. Este estudio, por lo tanto, examina la laguna sobre si la nueva normalidad es más productiva asegurando que la intención del plan de estudios hacia el conocimiento del contenido de los estudiantes se cumple o no. Se utilizó la teoría del cambio organizacional para teorizar el estudio dentro del paradigma transformativo (TP) y las lentes de la investigación participativa (PR) como diseño de investigación. El estudio se realizó en una de las universidades de Sudáfrica. Se seleccionaron diez estudiantes mediante la técnica de muestreo por conveniencia, ya que los estudiantes no se encontraban en su totalidad en el campus en el momento de realizar este estudio. Se adoptó la entrevista en línea para recoger los datos debido a las normas de distanciamiento social en todo el país. Se utilizó el análisis temático para interpretar los datos. Los resultados revelaron que la nueva normalidad del COVID-19 no afecta negativamente al rendimiento académico de los estudiantes, aunque la calidad de la impartición de contenidos sea baja. Se deduce que los canales de enseñanza-aprendizaje y el Internet de las Cosas son desagradables para los estudiantes, con recomendaciones de que es necesario proporcionarlo junto con la formación y el reciclaje de estudiantes y profesores.

**Palabras clave:** COVID-19, aulas universitarias, enseñanza y aprendizaje, teoría del cambio organizativo, aprendizaje en línea

Observation and experience exist among university students during COVID-19 new normal (online teaching and learning) that the quality and the process of academic activities have been compromised. This may not be unconnected with the unexpected events imposed on university education in to respond to the unexpected change caused by various levels of lockdowns in virtually all the countries of the world. The coronavirus disease originated from China in late 2019, and was later declared a global pandemic by the World Health Organisation due to its rapid spread to the countries of the world (Shereen et al., 2020; WHO, 2020a). There are many reactions, interventions, policy formulations and readjustment (Omodan, 2020a), including intellectual discussion on the outbreaks and their effect on humanity. This ranges from the new ways of living, such as the use of facemasks, implementation of social distancing, and restrictions on greeting styles (WHO, 2020b; Krishnakumar & Rana, 2020). This affects or changes human styles and the organisational system, which resulted in an economic shutdown in many countries (Ebrahim et al., 2020). Hence, the lacuna caused by the pandemic also affects the educational system, including South Africa, where all the universities, by the instruction from the Department of Education, declared that all students and staff must observe national lockdown by working from home with effect from March 2020.

Due to this, the universities changed their operational style to accommodate the change by implementing online teaching-learning to keep the flag of education flying. This new system required a drastic change among university human capitals such as student, lecturers, support and other staff. Higginbotham (2021) affirmed that the changes taking place in universities are the university admission process, the conduct of examinations, measures in the retuning of students to campus, and how to relate during the process to others. The predominant part of the changes that are of concern to this study is the change from blended learning to complete online learning, not only that but that online learning is taking place from a distance, that is home (AbuJarour et al., 2021). Universities in South Africa was not exempted from this "new normal". This was confirmed by Mahaye (2020) and Dube (2020) that schools and universities in South Africa were under lockdown with an unavoidable switch to the online teaching-learning system. During this inevitable change, perceptions, feelings, observations and complaints arose from the students who complained that the new system

was not accommodative to them with the claim that the new system may have compromised on the existing curriculum. These views may not be unconnected with what Omodan (2020a) referred to as the emergency of the unknown in the universities during the COVID-19 pandemic.

The above perceptions and views on the possibilities of the curriculum compromise in implementing online teaching and learning during the COVID-19 new normal may be connected to the variables such as course content, social and technological support, among others (Elumalai et al., 2020; Di Pietro, 2020). The findings of Elumalai et al. (2020) confirmed that there is a positive relationship between the course content, social and technological support and quality of e-learning in universities. This indicates that when there is a sudden change from the traditional teaching-learning system to the new normal, it may significantly affect the quality of curriculum implementation. Limitless to the curriculum implementation issue, university environmentalism such as the administration of the school system. This includes formulating and managing policies, lecturers and students' drives, and students' environment (Strike, 2018a). This is to support the claim that administrators' duties could not be underrated in the implementation of online learning (Strike, 2018b). Furthermore, since students work from home, their environment may also significantly affect how to respond to the new teaching and learning system. This opinion also suffixed in Omodan, Kolawole and Fakunle's (2018) findings that an environment where teaching and learning occurs has a significant correlation on students' academic performance. However, these factors are perceived to be insufficient for students in the current teaching and learning trend.

However, universities' unavoidable closure against students appears to be a pedagogical transformation that requires more than rapid response (CoSN, 2020) but provides educational resources for all the stakeholders. Findings also confirmed that the students' challenges in the wake of COVID-19 could affect their academic performance, including but not limited to student's access to internet connectivity, most specifically, rurally located students (Dube, 2020; Omodan, 2020a; Oreku, 2021). Another challenge is the live streaming of theoretical teaching and learning devoid of practicals via "Google classroom, Zoom, Easy Class, Go To Meeting, Blackboard® and WhatsApp" (Oreku, 2021; Jimola & Ofodu, 2021; Jinadu et al., 2021). These challenges may have contributed to the feelings and perceptions that the curriculum content delivery during the COVID-19 new normal has been

compromised. However, contrary revelations showed no considerable differences in students' academic performance before COVID-19 and during the COVID-19 new normal (Mahdy, 2020). The advent of the new normal in higher education institutions improves the "continuation of students' learning strategies and thereby improve their efficiency" (González et al., 2020). This has justified that adopting the new change is consistent with the original intention of curriculum delivery. Therefore, based on these misgivings, it is expedient to involve the students in the process that interprets the dynamism of the education system. This is why Kurt Lewin's three-step model change theory was adopted.

### **Theoretical Framework**

This is underpinned by the Organisational Change Theory propounded by Kurt Lewin and a tagged three-step change model (Lewin, 1947). The three steps include Unfreeze, Change and Refreeze (Sasere & Makhasane, 2020). The first stage which is "Unfreeze", according to Lewin (1947), is a stage that is "characterised with a process of dismantling the old ways of doing things, in preparation for the needed change". This is a stage that was "characterised by melting old behaviours and beliefs, resulting in the creation of awareness" that prepares people and the organisation ahead of the change itself (Sasere & Makhasane, 2020). This stage determines what needs to be changed, ensuring organisational and people's support and creating the need for the change through a convincing awareness (Raza, 2019). From this, we could argue that change is inevitable and for a change to occur, the people and the organisation must be ready to do away with the existing status quo and adopt a new way of doing things. The second stage, the "change process", is the stage where the change is put into action; that is, the change itself takes place (Lewin, 1947). This is the implementation aspect of the change involving action towards the organisation's focus, which according to Batras, Duff and Smith (2014, p.234), include "redesigning roles, responsibilities and relationships, training and up-skilling, promoting supporters/removing resisters". This stage also involves identifying direction towards the new ways of doing things, restructuring the management process, which includes channelling resources to promote the new normal and social, interpersonal, and political skills towards implementing the change (Beckhard & Harris, 1987). The third stage of the theory is "refreezing". This stage is where the

change is structured for sustainability, where the people involved considered the new change as the status-quo without further resistance (Raza, 2019).

This theory is relevant for this study because it helps us understand the process of change needed to be popularised among the university stakeholders, most especially the implementers and the receivers of curriculum delivery. First, the students must understand that the process of change is all-inclusive and not a one-sided phenomenon where students could claim superiority and lecturers should be condemned. However, both must see themselves as partners in progress. This becomes expedient since the current new normal in the university system was envisaged; therefore, the process of adjusting must evolve. In this case, the three steps of organisational change theory by Lewin (1997) enable the university management and policymakers to understand the need to adequately unfreeze people by preparing their minds with a lot of awareness regarding the need to adjust to the COVID-19 new normal. Secondly, the change process involves clear communication, promotion of action on the change, and active participation of every member of the organisation (Raza, 2019), including students and lecturers. Also, all university staff and students must see the COVID-19 new normal as a common enemy that must be combatted together. Finally, it is expedient for the university to devise a suitable means ensuring that everyone is carried along in the change process to enable continuity and suitable COVID-19 new normal. Based on this, the study resorted to examining the lacuna on whether the new normal is more productive by ensuring that the intention of the curriculum towards students' content knowledge is met or not.

### **Research Question**

By examining the lacuna on whether the COVID-19 new normal is more productive for curriculum delivery, the following question was raised:

- How can the possible abnormalities of the COVID-19 "new normal" be re-enacted to improve curriculum delivery in university classrooms?

### **Objectives of the Study**

In order to answer the above research question, the following research objectives were formulated to guide the process of the study:

- This study examines students' perception of the quality of teaching and learning during the COVID-19 new normal.
- This study also investigates how the universities can improve the quality of online learning to accommodate students during the COVID-19 new normal.

### **Methodology**

#### **Research Paradigm and Design**

This study adopted the Transformative Paradigm (TP) to emancipate the students who feel that the university system was not fair to them during the COVID-19 new normal. According to Chilisa & Kawulich (2012), the transformative paradigm destroys the myth, false knowledge, and illusion to empower the powerless, the less privileged and the researched. Apart from its aim to empower people, the paradigm also brings the researcher and the researched together to find solutions to their problems without any power differentials (Mahlomaholo & Netshandama, 2010). It enables the participants and the researchers to work together as a team in order to emancipate the disadvantaged without power supremacy (Dube, 2016). This is why we conclude to design the study with Participatory Research (PR) because it was adjudged as a way to implement the Transformative Paradigm "with a focus on the dynamics of emancipation" (Omodan, 2020b). PR is a research process that brings together people who face the problem to find a solution to the problem from the planning stage to the output stage (Krishnaswamy, 2004). In the opinion of Bergold and Thomas (2012), PR is a research process that enables the researchers to research those facing real-life experiences. This is to say that PR aims to ensure that the research process is made to accommodate the science of research (from the researcher) and the real-life practice (from the participants). By implementing this, we ensure that the participant was involved from the discussion to the knowledge generation stage with the equal opportunity to dismantle any evidence of power supremacy between the researcher and the researched.



## **Participants and Method of Data Collection**

The participants for this study include undergraduate students from selected universities. The students were selected to participate because the study intended to elicit the students' perception and understand their feelings towards the COVID-19 reality leading to the current wave of the new normal. The students were selected using the convenience selection method. The selection process does not hold any importance on the students' academic level since all students were included in the implementation of the new style in the system. Convenience sampling was used because it enables the researcher to use the easy and available participants for the study, assuming that all the population has the knowledge of the study nonzero chance of being selected using a randomised means (Lavrakas, 2008). We used online interview via emails, WhatsApp, and telephonic mean to elicit information from the participants. During the interview process, questions that were built from the above research objectives were posted to the participants with the freedom to answer the way they feel about the subject matter. The following questions were posed to the participants: What is your perception towards the quality of teaching and learning during the COVID-19 new normal? How do you think universities can improve the quality of online education to accommodate students during the COVID-19 new normal?

We ensured that research trustworthiness, equivalent to validity and reliability in quantitative research (Mohajan, 2017), is implemented. The interview process and outputs were handled with evidence of trust by providing an answer to the questions raised by Korstjens and Moser (2018 p.121) that “can the research findings be trusted”. We ensure that truth and reality suffixes in the data were presented as it was to ensure that findings are credible, dependable and confirmable.

## **Data Analysis and Ethical Consideration**

The data collected from the Participatory Research process was subject to the three steps of thematic analysis propounded by Thomas and Harden (2008) to categorise data into themes by coding texts, developing descriptive themes, and generating analytical themes. This was adopted because it helps us break down the data into themes according to the study's objectives. The

study's objective stood as major themes while the coded and categorised data formed sub-themes under each objective because thematic analysis helps to identify different sub-themes within a theme for clarity sake (Alhojailan, 2012). Approval for this study was not sought under any research entity because the study was not under any project, but designed based on the conviction and agreement by the authors on the need to conduct the study. However, ethical consideration was keenly followed and considered as very important to the process of our study because it protects both researchers and the participants from unethical conduct and harms (Babbie, 2014; Dixon & Quirke, 2018). By doing so, we ensured that all participants were briefed about the study. The consent to participate was obtained with the freedom to withdraw at any point during the research process should they feel uncomfortable with how the research unfolded. The anonymity issue was also observed by ensuring that the participants' identities were protected and their names represented with pseudonyms in the research's data analysis and production stage. This was done to protect them from being identified by their statements during the interview sessions (Omodan, 2020). To implement this, the students (participants) were represented as follows: Student 1 as S1, Student 2 as S2, Student 3 as S3, Student 4 as S4, and Student 5 as S5, .... Student 10 as S10.

### **Presentation of Data and Discussion of Findings**

The participatory research process was guided by transformative principles using online interviews which were coded, categorised and analysed using thematic analysis. This was done in line with the research question, which was answered using the two research objectives. The first objective came up with three sub-themes, while the second objective came up with two sub-themes. See Table 1 below for understanding.

Table 1

*Thematic representation of data based on the research question and objectives*

**Research Question:** How can the possible abnormalities of the COVID-19 "new normal" be re-enacted to improve curriculum delivery in university classrooms?

### **Objectives**

1. The perception of students towards the quality of teaching and learning during the COVID-19 new normal.

2. How the universities can improve the quality of online learning to accommodate students during the COVID-19 new normal.

### **Analysis of Sub-themes**

*No wide differences in academic performance.*

*Low-quality content delivery.*

*Unpleasant channel of teaching-learning and the Internet of Things.*

*Provision of the Internet of Things.*

*Training for both lecturers and Students.*

## **Objective 1 Theme 1: No Wide Differences in Academic Performance**

When there is a change, it is expected that the change will be positive, but the change resulting from the COVID-19 pandemic brings confusion as to whether the change will be positive or negative on the students' academic performance and productivity of education institutions. The literature indicates that even though the change universities are experiencing is a result of negative contingencies, productivity, with regards to students' performance does not have a drastic negative influence (Gonzalez et al., 2020). These statement by participant S2 below also justified this:

S2: Even though the quality before and during COVID-19 is not the same, but the quality is not too bad during COVID-19. We have been learning online for almost the whole year, so we have mastered how to do things accordingly and how to overcome the challenges we face due to the pandemic.

This states that there is no huge variance between the kind of education received in the past and during the COVID-19 new normal. This is probably because the students have been used to blended learning, where they combine

both physical and online learning together. Because of this, S2 further confirmed that they have mastered and used the online teaching-learning system, thereby no more a problem for them to cope with it. Apart from this, the data also showed that students' academic performance did not go down negatively despite the hurdles. This surfaces in the participants' statements.

S7: Evidently, the nature of online learning won't be the same as face-to-face teaching because we are expected to cover too much content in a short period of time but then, we still pass despite the many factors that affect us during the stay-at-home sessions.

S10: We've learnt to cope with all the pressure, and we are doing well at last. We managed to pass and help our colleagues with challenges to pass, so we managed to save the year academically.

S3: In terms of my performance, there are no differences in the way I used to pass my modules; I only needed to adjust my style of studying.

S4: This time, I did not fail any module, unlike when I was in the first year, right now, I am able to make use of the internet to do my studies.

Participant S7 mentioned that it is not the same as face-to-face because students are stuck with too many responsibilities and work to cover, but the students still manage to pass their assessment. Participant S10 also confirmed that students have learned to cope with all the pressures from online learning and still pass their assessments. In this case, S10 mentioned that they helped one another succeed, especially the students with various academic challenges. The participants' revelations are an indication that the sudden change because of the COVID-19 pandemic has little or no impact on the students' performance. To confirm this, participant S3 also reiterates that there is no difference in his performance before and during the complete online learning, but he could adjust to the new change accordingly. Participant S4 also confirmed that she did not record any failure in any of her modules during the implementation of complete online teaching-learning.

Based on the above analysis, it was revealed that the university system's change as a result of the COVID-19 pandemic does not have a significant adverse effect on the students' academic performance. The student

experiences some challenges, but it does not affect their productivity. This further confirms Gonzalez et al. (2020, p. 19) claims that students, during the new normal, found a way of motivating themselves to work for their academic success and that they obtained better results in all kind of assessments during "COVID-19 confinement". However, the finding was contrary to Mahdy (2020) conclusions conducted on the academic performance of medical students, where the result showed that the full implementation of online learning during COVID-19 affects practically teaching and learning. The findings' variance may be linked to the availability of vis-à-vis non-availability of resources in the research locations. Not only that, the effect of the COVID-19 pandemic may vary on science-related courses, humanity and social sciences where little or no practice is needed.

### **Objective 1 theme 2: Low-Quality Content Delivery**

Students' perceptions as to the fact that the current COVID-19 new normal have significantly affected the quality content delivery of the curriculum seems to have waned. This may be connected to the urgency in the change from blended learning to the complete online teaching-learning that did not allow the university to create enough awareness. Hence, low-quality content delivery is evident in the perception of the participants during our interviews. See the below statements:

S3: Quality depends on the person teaching or issuing out information and if the information was issued accordingly and reached the student in time. If that information was useful, then I think we may say the quality was good. Some lecturers did well while some just post information without follow up.

S4: The quality of teaching and actual learning is poor; lecturers do not give it enough time to conduct lectures properly and adhere to concerns that students might have.

S9: Our current teaching and learning lack the usual collaborative lessons with lecturers as students that we are used to.

From the above statements, participant S3 laments that the communication process from lecturers to students was not effective during

the new normal, which might have affected the way the students were either informed or misinformed about their academic prowess. According to participant S4, some lecturers do not give enough time to properly conduct lectures and adhere to the concern that students could have, resulting in poor learning. From participant S9's perception, the current teaching-learning system has hindered the usual collaborative learning where both students and lecturers construct knowledge jointly. In the same vein, the participants below also justify that the current style is not robust enough.

S5: Some lecturers only put slides or other materials on the blackboard, thinking that it is enough, but students find it hard to do all the work alone without any assistance.

S1: Lecturers take time to respond to students' concerns through emails, which is another issue of virtual learning and improvement of knowledge that is disturbed, and that leads to students having little understanding of the content and eventually copy everything on the internet".

S8: And the lack of lecturers' communication amongst themselves makes it challenging for students to tackle assignments as expected due to work overload.

To further justify the low delivery of curriculum content, S5 lamented that some lecturers only upload learning materials online without a follow-up to confirm if the students are okay with the content or not. Thus, according to S5, it is difficult to succeed without the assistance of the lecturers. The statement from participant S1 that lecturers do not respond to students' concerns led to students not having enough understanding of the taught content. Not only that, but it also made students resort to copy-and-paste when doing their assignment. Participant S8 also laments that there is no cohesion of duty among lecturers in terms of giving out assignments which led to students having to deal with too much work at the same time. One could deduce that the quality of content delivery during the sudden change caused by COVID-19 had resulted in low-quality teaching and learning in universities.

It was revealed that there is low-quality teaching and learning in universities during the COVID-19 new normal (online teaching and

learning). These findings are consistent with the findings of Duraku and Hoxha (2020) that the new normal caused by the COVID-19 pandemic has raised many worries about the compromised content delivery to students ranging from low-quality assessment and evaluation overloading the students and incompatibility of learning contents. This finding also aligns with the postulation that the spread of the coronavirus would cause fear and anxiety in the world, which would also influence inadequacy in the use of online learning among students (UNESCO, 2020; Psychological Center, 2020).

### **Objective 1 theme 3: Unpleasant channels of teaching-learning and the Internet of Things**

One of the challenges of teaching and learning during the wake of COVID-19 is the use and the unused channels of teaching and learning, including the non-availability of the Internet of Things such as devices, data and academic applications. This also surfaced in the participants' statements as recorded in the conversations below.

S3: There are other issues as well that affect the quality of teaching and learning negatively, such as having limited internet access, which means that work to be done may not be completed on time.

S4: The new way of teaching and learning during the COVID-19 pandemic was a bit challenging for almost all of us (lecturers, tutors and tutees). Tutees were not getting the same treatment as on face-to-face learning. Some had a lack of resources, and yet they were still expected to meet their objectives.

S5: The lecturers did their best to try and use Blackboard collaboration as their lecture rooms, but some students did not participate in them as much as they should due to the lack of knowledge and training on using the different tools for learning available on Blackboard.

S7: On the other hand, this online learning is disturbed by poor network connection and sometimes load shedding of which we cannot control.

From the statement of participant S3, the issue of no or limited access to the internet also affects students' activities, which hinders them from responding to academic issues as and when due. Participant S4 lamented that the new teaching and learning method during COVID-19 was challenging due to limited access to resources such as the Internet of Things to do their academic work effectively. Participant S5 reiterated that despite the readiness of lecturers to perform their teaching duties using the Blackboard® learning system, many students were unable to attend because of a lack of knowledge and enough training on the use of teaching-learning applications. Participant S7 also shared the idea that online learning is being hindered by poor connectivity and epileptic power supply. The issue of lack of devices was also shown in the conversations below:

S6: According to my perception, online learning will be complex, mainly when there are no learning tools (laptops and data). Yes, the global protect app works adequately but not for all the websites needed for academic work. It is also slow when accessing some academic websites. In that case, it can affect students' processes."

S10: "The quality of teaching and learning has been slack since COVID-19 pushed us to adhere to social distancing procedures and allowed the use of online learning, which requires data that one struggles to have. Sometimes, students cannot get connected to online classes, which negatively impacts the student's academic performances."

The statement by S6 above shows that the continuation of online learning without the provision of adequate devices to students makes it more difficult. Even though the university in focus supplied students with an application called global-protect, students could access only content on university websites, which was not enough for academic work outside the university website. The connectivity on the application was slow and became ineffective for effective learning. To complement this, the statement by participant S10 also confirmed that students struggle to hold up with sufficient and adequate data/internet to attend online classes.

From the above analysis, one could deduce that teaching and learning channels, coupled with the non-availability of the Internet of Things, challenge the university system. This is in accordance with Muximpua and



Nhampossa (2020) recommendation that university students, during the COVID-19 new normal, need to be equipped with the devices, internet, and knowledge to navigate it. Stelitano et al. (2020) findings also confirmed that many schools, primarily those with learners living in rural locations, have challenges accessing good internet facilities to respond to their studies during COVID-19 lockdown.

### **Objective 2 theme 4: Provision of Internet of Things**

In order to provide solutions to the above perceptions in the form of challenges that the participants raised during our interview with them. Among the suggestible solutions is the provision of internet-of-things for the students to adjust well to the new system of teaching-learning that has become a way of life in the university system. The participants' statements below confirm the need for the provision of adequate internet of things;

S1: The University should provide students with enough data to allow students from poor rural areas with low network and electricity problems to cope well with their studies.

S3: Universities have done a lot to accommodate students, but it is not enough. The monthly data provided is not enough; in fact, it is very little compared to the amount of research, studying online that students have to do.

S4: Increasing the data allowance would be good.

S9: The students should be given monthly data to access all websites when doing their academic work.

From the above statement, S1 called on the university to provide them with internet access such as data. These participants refer to rural students who might have been disadvantaged from access to social amenities. The statement from participant S3 indicates that the university has done enough to accommodate the students in its decisions to implement new normal, but the student also ended by saying the students need enough data to engage with online studying. The same student also called up from participant S4 that the University should increase the student's data allowance. Participant

S9 also supported that the students should be given internet data monthly to enable them to do their online academic activities. Not only monthly but beyond, this was reiterated in the below statements.

S5: University must at least provide us with data throughout the year because truly speaking, online learning becomes a burden if one does not have access to information required (data to conduct research and Google for information related to the content taught"

S10: The institution should consider the issue of data to meet the quality of both learning and teaching that will accommodate all students to have access to daily classes that will be taking place.

The call from S5 is still on the possible provision of internet data by the university to the students. According to S5, this will constitute a burden on them if there is limited data within the confinement of students. On the final note, as stated by S10, the universities should take internet data very seriously by providing it for the students to adapt well to the needed changes. This agrees with the organisational change theory assumption that the policymakers should ensure organisational and peoples support and create the need for the change through a convincing awareness (Raza, 2019). This will then prepare university students as essential stakeholders in the change process (Sasere & Makhasane, 2020).

## **Objective 2 theme 5: Training for Both Lecturers and Students**

The data collected also suggested that both students and the lecturers needed to be trained to have more and adequate knowledge of the teaching and learning in the university system. This also confirms that adequate information and resources needed to execute such change must be made available for a change to occur. This is not limited to human and material resources such as training and retraining that could increase the change agent's knowledge. The statements below also confirm the need to train both the students and the lecturers.

S6: The university must provide training for all students (first-years to final years) on how to access different tools on Blackboard and how to make use of those tools to enhance their learning."

S4: Moreover, lecturers need to attend training on how to conduct lectures through the internet as it seems like some of them have little knowledge about e-learning, which has a negative impact on learning and teaching.

From participant S6, the university must provide students with training on navigating through online learning platforms such as Blackboard®. This will also enhance the students' ability to engage in online learning. The statement by participant S4 also confirmed that lecturers also needed to be trained on how to conduct effective online lectures. According to the participant, some of the lecturers have little knowledge of e-learning which negatively impacts teaching-learning productivity. The also confirmed stage two of Organisational Change Theory that proposed that for an effective change to take place, the implementation aspect of the change involve action towards the focus of the organisation, which according to Batras et al. (2014, p. 234), include "redesigning roles, responsibilities and relationships, training and up-skilling, promoting supporters/ removing resisters".

## **Conclusion and Recommendations**

The trajectory of online teaching and learning has come to stay, if not forever, but for the time being, which called for the continued adjustment to the new normal in the universities. They responded to this through the lens of the transformative paradigm using participatory research to design the research process to find solutions to the problem to the perceived problem of curriculum content delivery during COVID-19 online teaching-learning. Based on the study's findings, we conclude that the current COVID-19 new normal, though does not significantly affect the performance of the students, but the quality of content delivery is low and does not adequately represent the need of the university students. However, this may result from the sudden change, which needs a lot of persuasions and awareness among the stakeholders. Also, the channels of teaching-learning and the Internet of Things are deduced to be unpleasant for the students. From the findings, we also conclude that the provisions of the Internet of Things and adequate training for both the students and the lecturers are considered the dimension that could sustain the introduction change in the teaching and learning during

and after the COVID-19 pandemic. Based on these, we recommend that universities in South Africa need to ensure adequate data and provision of internet-or-things for the students. Secondly, the students and lecturers should be trained and retrained to become competent and up-to-date with the new normal trajectory in the university system.

### **Limitation and Recommendation for Further Studies**

This research was limited to a single university in South Africa, which might have limited the generalisation of the result. This study also used limited participants which might not represent the perception of the entire student, but the number of the participants is still within the principle of qualitative research. Hence, further studies could be conducted using multiple universities and probably using a quantitative research approach to see if further revelation could emerge.

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**Bunmi Isaiah Omodan** is a Postdoctoral Research Fellow in the School of Social Sciences and Language Education at University of the Free State, Bloemfontein Campus, Republic of South Africa. ORCID: [0000-0002-9093-3108](https://orcid.org/0000-0002-9093-3108)

**Olugbenga A Ige** is a Lecturer and Discipline Coordinator in the School of Social Sciences and Language Education at at University of the Free State, Bloemfontein Campus, Republic of South Africa. He is also the Coordinator of the Special Interest Group on Social Sciences and Economic and Management Sciences (SSEMS, SIG). ORCID: [0000-0002-6505-2114](https://orcid.org/0000-0002-6505-2114)

**Contact Address:** Bunmi Isaiah Omodan/Dr. Olugbenga Ige, 205 Nelson Mandela Drive, Brandwag, Bloemfontein, Republic of South Africa. Email: [omodanbunmi@gmail.com](mailto:omodanbunmi@gmail.com)