

TEACHING ONLINE AND BUILDING LEARNING COMMUNITIES DURING A PANDEMIC IN HIGHER EDUCATION IN NIGERIA

By

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Abstract

Teaching online and building learning communities in higher education during a pandemic in Nigeria and beyond cannot enjoy a better sphere of discussion than now owing to the unprecedented trauma, calamity and difficulties the COVID-19 pandemic has brought to teaching, learning and living generally. Since the onset and arrival of the Covid-19 pandemic to the universe, mankind has lost his peace and education has lost its balance. This paper is hinged on two theories. The Technology Acceptance Model (TAM) and theory of Constraints (TOC) which will explain the course of action taken in the project. The research also spelt out a practical guide to leading institutions online and the Engaging Strategies. Tracks on how the methods were used were outlined. The reasons why the methods used were chosen were also enumerated. Several challenges were encountered amongst others: firstly, the fear of change and resistance to move online and teach remotely, initially by the institution, next by the stakeholder involved in teaching and learning. Secondly, the challenge of gender issue and discrimination was a major obstacle to overcome. The Journey so far and the success story were also outlined.

Keywords: Teaching online, Building learning communities, higher education

Introduction

When the COVID-19 hit the shores of the universe, higher education institutions especially in Nigeria and beyond were thrown aback, swallowed in shock and bewilderment. According to the United Nations, policy brief on Education during COVID-19 and beyond (2020), 98.6% of learners worldwide representing 1.725 billion school aged pupils and students in about 200 countries

were affected by the Covid-19 pandemic. Many institutions were at a loss about how education should continue without teachers and students, meeting face-to-face. The sudden emergence of the Covid-19 and the lockdown of schools with the resultant effects of education moving home, revealed the digital unpreparedness of the higher education sector especially in Nigeria. Most institutions as evidenced from the result of the virtual survey of the July and September 2020 ADECT- AECT Virtual International conferences on Telegram and zoom revealed that 66% of higher institutions only depended on public cloud computing for online learning and interactions because of its economic/low-cost benefit, accessibility and connectivity advantage without institutions' having to undergo institutionalized programmed and dedicated cloud computing sites.

This survey result is in line with the study conducted by Achimugu, Oluwagbemi and Oluwaranti (2010) on the evaluation of the impact of ICT diffusion in Nigerian Higher Educational institutions which revealed that tertiary institutions in Nigeria lack adequate ICT infrastructure with a student low computer ratio which is averagely put at about 1 to 40 to effectively use the opportunities offered by the cyber space. The 21st Century scene is dominated by technological developments which have ushered in new dimensions and challenges in teaching and learning throughout the world especially the developing world. The effects of the pressure of the rapid changes in technology has exposed the scenario of teachers, students, educational planner and policy makers evidently caught in the Covid-19 pandemic web of teaching and learning while striving to adjust to demands of the technological age. The quality of education that our learners acquire bears direct relevance on the integration of communication technology in teaching and learning.

Theoretical Framework

This paper is hinged on two theories. The Technology Acceptance Model (TAM) and theory of Constraints (TOC) which will explain the course of action taken in the project.

Technology Acceptance Model

The technology Acceptance Model propounded by Davis, 1989 is an information systems theory that models how users come to accept and use a technology. This model suggests that when users (Higher Institution leaders/Heads/Administrator/Lecturers) are presented with technology, several

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factors influence their decision about how and when they will use it. The factors involve an interplay of perceived usefulness of the particular technology, perceived ease -of- use of technology that is free from stress and the external variables that has to do with the actual features and capabilities of the technology involved.

When higher education institutions and their government understand the gains of accepting and utilizing the new technologies, more effort will be made to budget for them, train, integrate and desire to utilize it. In this study, the heads of institutions, Deans, heads of department, lecturer/faculties were stimulated through series of lectures, demonstrations and motivational speeches to key into the idea integrating and utilizing the available technologies undermining the operating constraints and enhancing the positive factors.



Source: Participants during coaching at COE, Agbor before moving online May 2020.



Source: Participants during coaching at COE, Morsogar. June 2020

Theory of Constraints (TOC)

The theory of constraint propounded by Dr Eliyahu Goldratt focuses on identifying the most important limiting factor that stands in the way of achieving a goal and then systematically improving that constraint until it is no longer the limiting factor. Some major constraints like the high cost setting up ICT infrastructure/provision of Computers facilities, irregular power supply, internet connectivity, lack ICT/technical skill for integrating and launching online learning and interaction were gradually minimized and, in some cases, completely eliminated through the use of the set tools which includes the:

- * five focusing steps (a methodology for identifying and eliminating constraint)
- * The thinking process (tools for analyzing and resolving problems)
- * Throughput accounting (a method for measuring performance and guiding management decision).

Review of empirical studies

The outbreak of the COVID-19 pandemic ushered in huge initial educational displacement and challenges which heralded the exposure and explosion of utilization of digital technologies in teaching and learning in institutions all over the world. The transition to online learning, leveraging on previous experiences of some faculties with blended learning, training of other faculties, were tools used Taibah University. This study was carried during the pandemic by Mahyoob (2020). The study answered five research questions and four objectives of the study to find out the challenges confronted by learners in Taibah University, Saudi Arabia during the transition to online learning in the

second semester of 2020. The sample size comprised of 184 students. The result revealed that 69.80% of learners could use all the Blackboard services for online learning activities. 10.50% only could attend classes. WhatsApp usage for conducting classes was most efficient as in the current study. The learners who did not encounter any problem of internet connectivity speed were just 18% only making a similar problem of this current study as well. This study is in line with the current study which looked at teaching online and building learning communities during a pandemic in higher education in Nigeria. They are both case studies.

Jude and Dankaro, (2012) carried out a similar study to investigate the utilization of ICT in the institutional mix by teacher educators in colleges of Education, Katstina-Ala, Benue State Nigeria. The findings reveal that ICT facilities were not available and teacher educators could not access them which is similar to study under review. Murgatrot, 2020, in Sumitra Pokjrel and Roshan Chhetri (2021) study on the impact of COVID-19 Pandemic on Teaching and learning, identified in his study the challenges of e-learning as accessibility, affordability, flexibility, learning pedagogy, life-long learning and educational policy which is similar to the challenges experienced and revealed in this study of teaching online and building learning communities during a pandemic in higher education in Nigeria.

Methodology

This research is a case study of State-owned colleges of education in Delta State Nigeria. It is also an interpretative research design because it required the use of the knowledge gained from Emergency covid-19 pandemic experience. The area of study is Delta North and Central senatorial districts. All teachers and learners in Colleges of Education, Agbor and Mosogar formed the population of the study.

It is practical based, real experience research and descriptive in nature. The design is appropriate for the study which sought to investigate teaching online and building learning communities during a pandemic in Higher Education in Nigeria.

A practical guide and Engaging Strategies

Bridging digital gaps and training both teachers and students with skills to adjust and fit into the new normal. Students were encouraged to bring and use their

devices because there is no institutional and government provision of computers for students and teachers who do not have any.

Tracks on how the methods were used?

1. The first step to leading the institutions online was to identify the state of our infrastructure in term ICT facilities, technical skill level of staff and students. The slogan was “use what you have already have to get what you want” to discourage staff from only concentrating on the challenges but proffering likely innovative solutions.
2. The Step, having identified the constraints was to carry out a sensitization session and training to equip the top management staff, starting from the chief executive, principal officers, then down the ladder.
3. The next step was using what we already have like computers and laptops in laboratories, personal android phone, iPhone, iPads and the purchase/subscription of data for the laboratory for the training sessions.
4. The next step was the practical application of online tools. The staff were taught how to both use the synchronous and asynchronous online tools especially the Zoom app because it has a free version of it. They were coached on how to break their classes into groups to enable them to make use the free facilities.

There was also the heavy use of WhatsApp by students, teacher, and management to support themselves. The WhatsApp was already popular as social media tool used among staff and students but an improved mode of usage for academic interactions. Emails were also used, and Telegram app was seldom used by the students.

5. The was a massive use of video and audio recording of lessons for students. This method proved to be loved by students with challenges of internet connectivity in their geographical locations and for others who depend on the use of parents or neighbors’ digital devices for lessons.
6. The monitoring and evaluation stage: This were very critical stages that required diligence, passion, dialogue, strength of purpose, rewards, and punishments for breaking institution policy on implementation of remote teaching and learning.

Methods and Why?

These tracts/steps were chosen although not earlier tested but worth trying out which eventually proved to be ideal and served the purpose. These methods were chosen because the problem of technology integration in teaching and learning in institutions in Nigeria and Africa as a whole, were not just lack of infrastructural facilities but the lack of skillfulness to actually utilize the available facilities within the limited conducive environmental space. Basilaia & Kvavadze, 2020; Toquero, 2020 in Cronje J., (2021) observed that a very rapid large-scale migration from contact i.e face-to-face to online education at both school and University level which forced instructors to innovative in unprecedented ways pulling down bureaucratic barriers. This sudden change in the educational scenario prompted the researcher to embark on this exploit of innovation. The courage to accept and to make changes is another factor hence the journey started with persuading the heads and leaders of institutions together with other stakeholders to accept the wind of change and adjust to the new normal. In line with Rideout and Robb 2018 in Galvin & Greenhow (2020)'s view that young people are writing online prolifically, revealing that seventy-three percent of teens use multiple social media daily accessing two or more platforms. The researcher exploited this strength of youth digital literacy through the social media. For young people, social – media are platforms for their most-used digital literacies (Anderson and Jiang 2018 in Galvin & Greenhow 2020).

Challenges and Prospects

Several hurdles and challenges were encountered.

First major challenge was the fear of change and resistance to move online and teach remotely, initially by the institution, next by the stakeholder involved in teaching and learning.

The issue of the gender discrimination was experienced, until measures were put in place to compelled people to comply.

Hands on experience – No proper policies to guide institutions, teachers, staff, and students because the situation was novel.

No access of funds/grants by institutions, teachers & students. It was sacrificial and private funding.

Most students or end users were geographically isolated from network connectivity, and some do not even have the devices to use. This study is line with Ofcom (2020)'s research in Coleman (2021) which revealed that data on UK households found that approximately 9% of households with children lacked access to a laptop, desktop, or tablet; 2% had no access to the internet and 4%

had smartphone only access. Children in lower earning households were more affected by these issues: 21% of households with children where the main salary earner was in semi-skilled or unskilled work had no home access to a laptop or a desktop or a tablet, with 6% having no access to internet at home and 9% having smartphone only internet access. These children were more likely to be digitally excluded during the switch to remote learning was the case in this present research teaching online and building learning communities during a pandemic in higher education in Nigeria where many teachers, school, and government were not well prepared for remote education at the start of the pandemic in Nigeria. Murgarotd, (2020) in Sumitra Pokjrel & Roshan Chhetri (2021) broadly identified challenges with e-learning as including accessibility, affordability, flexibility, learning pedagogy, life-long learning and educational policy which are similar the challenges faced in the current study.

The Journey so far and the success story

Helping institutions move online during the lockdown was a personal decision motivate and support bewildered institutions, teachers, and students in the COVID-19 emergency and to contribute the survival and sustenance of education system. It was a dream that was pursued with determination and a drive to succeed in the venture.

- These were steps/methods taken to achieve the transition
- Dispelling faculties/lecturers' fears and worries
- The first stage was Persuading faculty members to consider moving online
- Meeting with union leaders who were initially agitating against the use of digital tools to create a smooth sail of the e-learning.
- Create a central recording/the ICT Centre where lecturer can take turns to record their teaching in the studio/Centre and then forward it to their students through WhatsApp and other apps.
- It requires commitment on the part of management and students
- There is now great compliance.

Recommendation

Integration solution – integrate and connect with people that know what you don't know and with people that don't know what you know.

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Institutions should be encouraged to look inwards for solutions, brainstorm for ideas and make use of what they have intellectually, technically, socially, and collaboratively.

Ideal solutions should be welcomed no matter who is proffering weather a junior or a high-ranking officer.

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