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Virtual Education in Nigerian Universities: A Philosophical Appraisal

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Abstract

This paper examines the concept of education and the practice of virtual education in Nigerian universities. The concept of education was analyzed and taken to mean all the activities that promote learning regardless of whether it takes place within or outside a school setting. The criteria for education were put forth to include any activity that is meaningful and worthwhile, promotes flexibility, openness to varieties of learning experiences, skill acquisition and indebt understanding of principles. Otherwise known as e-learning, virtual education is presented as an electronically aided means of facilitating teaching and learning at all levels of education. This could be via prerecorded videotapes, zoom, google-meet, google classroom, and any other means excluding face to face contact. Unlike traditional patterns, it is not limited to time and place, promotes student-centred system, exposes students to a variety of learning materials, allows for active interaction and facilitates shared experiences among students from different backgrounds. Access to university education is therefore enhanced. Unlike developed countries, the combined problems of poor electricity, inadequate funding, insufficient computer compliant university teachers, poor facilities, lack of political will by the government are some of the problems bedevilling massive usage of virtual system in Nigerian universities. Thus, it is suggested that there should be increased funding and policy framework by relevant authorities to ensure effective application of virtual education in Nigerian universities. While the aptness of virtual education is undeniable, it is needful to consider the benefits of adopting a hybrid of virtual education and conventional schooling through comparative analysis.

Keywords: Virtual Education, Philosophical Appraisal.

Introduction

Education is an indispensable practice that forms part of an integral means of socialization and human development. Through education, individuals are armed with progressive knowledge, intellectual skills and moral courage to do what is right and refrain from deviant acts. Educational practices cannot be detached from humankind otherwise there will be no substantial means of developing creative and manipulative skills for daily living and social interaction. While it is true that learning is central to education, it is also true that consciously or unconsciously, learning can take place **anywhere**.¹ In the strict sense, however, reference to formal education revolves around an organised, systematic and well-ordered arrangement wherein people learn according to their age and level of understanding, using a carefully designed curriculum. Traditionally, this experience is acquired in a school setting with clear-cut structures, manpower, libraries, laboratories, facilities with specifications, relevant instructional tools and other requirements as may be prescribed by established authorities. Innovations in science and technology plus trends and emerging realities such as the COVID-19 experience justifies the demand for a review of these traditional practices and the need for virtual education globally. While this trend is realistic, it raises thought-provoking questions revolving around its practicability, functionality and comprehensiveness. Basically, these concerns spring from the peculiarities and challenges of the third world, ranging from technicalities, political will, funding, corruption, exposure and redundancy among key stakeholders. Against the foregoing background, this paper takes a cursory look at the practicability of virtual education in Nigerian universities.

Conceptual Meaning of Education

Defining education is no easy task. It is a concept that eludes a generally acceptable definition given the multiplicity of meaning ascribed to it and the diverse sides from which it has been considered over the centuries by different scholars. Be that as it may, Gbari noted that it is etymologically coined from the Latin word *educare* which means to bring up, raise up, to rise, to nourish, to train or **mould**.² It could also mean to lead out or bring out the potentialities of individuals for a useful and productive life. In line with this conception, the definition of education can be mirrored from two perspectives, namely, the broad and the strict **perspectives**.³ In the broad sense of the term, Okafor observed that education involves “all those experiences of the individual through which knowledge is acquired, the intellect enlightened or the will **strengthened**,”⁴ For the avoidance of doubt, this approach is not restricted to any form of education, namely, formal, informal and semi-formal as the case may be. Thus, Ogwuiche observed that “experience which is central to this definition has to do with knowledge acquired through the senses: be it sense of sight, smell, hearing, feeling or **taste**.”⁵ Furthermore, he described the intellect, as the faculty of cognition or the power of the mind which is trained to apply reason most effectively while reference to *will* in this definition demonstrates the faculty of option which allows us make choices and express **emotions**.⁶

In the strict sense, Okafor defines education

as the process of acculturation through which the individual is helped to attain the development of his potentialities, and their maximum activation when necessary, according to right reason and to achieve thereby his perfect self-**fulfillment**.⁷

Despite the brilliance inherent in the above definition, it appears ambiguous since the criteria for *right reason* as highlighted in the definition was not mentioned or explicitly stated. However, it makes clear the fact that education is a conscious and carefully planned process determined by mankind to develop his potentialities, understand his environment and gain mastery of the universal order for resourcefulness and enduring benefits. This may include the acquisition of requisite skills, attitudes and values that are considered meaningful, result-oriented and worthwhile. Such a system requires the incorporation of progressive practices and perhaps, be measured on the basis of Bloom's principles of cognitive, psychomotor and affective domains of education. The three domains of education represent knowledge, skills and character formation, respectively and should be achieved as a collective whole. Hence, scholarship and human development is best understood or expressed using these tripartite folds of educational objectives – i.e., knowledge, skills and moral values. None can exist in isolation of the other for they are indivisible.

In a somewhat similar manner, RS Peters believes that education is worthwhile if it meets certain criteria or specific conditions. First, it should be capable of equipping the individual with specialized skills and indebt reasoning ability to understand the nature of things in the most appropriate manner, discourage rigidity in favour of openness to innovative ideas and the capacity to connect divergent ideas meaningfully. Furthermore, good and desirable conduct, alignment with the philosophy and peculiarities of a people in terms of contents and methods to reflect relevance to society and emerging trends were duly highlighted as meaningful criteria for education that is considered **worthwhile**.⁸ This makes education progressive. An activity that is never static in nature but amenable to change and result oriented practices.

To be sure, if education wears a progressive outlook and advance the cause of social innovation, what then should be the aim of education? What method and approach should be adopted for the efficient realization of educational aims? How well can the methods and aims of education be implemented to meet the peculiarities of the emerging social order? These are some of the perennial questions confronting the curious mind. In answer to the question of aims of education, Ogwuiche Identified the acquisition of minimum skills (i.e. literacy and numeracy skills), vocational training, development of critical outlook, stimulating the desire for continuous learning, moral and character training and the development of leadership abilities as some of the aims of **education**.⁹ Granted that this could pass for the aim of education, we are confronted with the question of how these aims are achieved or implemented, at least in this present time and age. What is therefore required is a critical reflection on the nature of the existing social order and the peculiarities inherent in it, namely, science and technology, and the prevailing trends of social distancing due to COVID-19 experience.

The Concept of Virtual Education

Virtual education is another name for e-learning. It is essentially associated with an electronically aided learning system and does not require any form of face-to-face components. It involves the use of technology and internet facilities as against traditional school settings. According to Schlosser and Simonson, virtual learning is defined as a functional and effective learning platform that is done without the prevailing face-to-face contact in traditional classroom setting.¹⁰ Clearly, his definition attempts to demonstrate the difference between distance learning and the traditional system of education which requires a designated location. Distance appears not to be a barrier as virtual education essentially requires users to employ ICT and internet facilities. For clarity, Virtual education could either be in form of blended learning which requires “having between 30% and 80% of the course content delivered online” or an online course wherein “at least 80% of the course content delivered online.”¹¹ So far, it is undeniable that virtual teaching and learning places a new burden on learners and instructors – which is, the need to acquire skills associated with electronic gadget, computer, and internet facilities. An appreciable understanding of the dynamics of the system and how it differs from the traditional face-to-face system of teaching and learning is also required.

Dolence and Norris perceive the development of virtual education as a child of necessity whose emergence is closely tied to the transformation that occurred from the industrial age to the age of information.¹² They observed that social institutions (higher education inclusive) had to undergo transformation in terms of the content of learning and how it should be learnt. For ease of understanding, Dolence and Norris¹³ compared the characteristics of learning in the industrial and information age. The summary of their comparisons is highlighted below:

1. While the industrial age is characterized by a teacher-centred approach to learning, the information age is learner-centred.
2. An established time and place for learning exist in the industrial age. Whereas in this information, what exists is individualized instruction which allows learning to occur anytime, anywhere. Learning is not subject to the dictates of time and place in the age of information.
3. During the industrial age, technologies are used independently of each other while the information age uses integrated technologies in a dove-tailed approach.
4. The courses are carefully selected and well-structured in the industrial age while in the information age, we pick and choose learning experiences based on interest and need.
5. Continuing learning was practised during the industrial age but in the information age, lifelong love for learning is emphasized.

The Evolution of Virtual Education in Nigerian Universities

Most reasonably, it is safe to assert that the birth and usage of e-learning is tied to the advent of electricity and ICT. In Nigeria however, the practice is relatively new. To be sure, while the system is not entirely alien to some Nigerian universities, it is non-existent in most university institutions. In support of this view, Adaji, Salawu and Adeboye write:

Here in Nigeria, very few of our conventional universities are now carrying out their academic activities through one form of ICT or the other. While the urge to embark on e-learning is still a dream to some because their infrastructure of ICT is very weak. The rapid expansion of ICTs in Nigeria now offers an opportunity to consider their use in the promotion of Distance Education (DE). It offers students considerable benefits including increase access to learning opportunities, the convenience of time and place, making available a greater variety of learning resources, improve opportunities for individualized learning and emergence of more powerful cognitive tools.¹⁴

The peculiarities of the Nigerian state, given her large size and population as well as the low access to university education, makes Distance Education (DE) and e-learning a necessity. Again, Ajadi, *et al* observed that Nigeria is the most populous nation in subs-Saharan Africa, occupying a land mass of about 923,768 square kilometres.¹⁵ In the face of the dwindling economy, there is no gainsaying that funding conventional schools considering the competing social needs could be somewhat difficult. At the risk of sounding too critical, it is common knowledge that even the insufficient financial allocation earmarked for education is not free from misappropriation, embezzlement and looting by corrupt government officials. What is left of this cannot be used to make any meaningful impact. While virtual education appears to be an appreciable alternative, its future cannot be adequately guaranteed because it is by no means free from the prey of corrupt and incompetent managers.

The history of e-learning in Nigeria is closely tied to Distance Education. E-learning which is largely a means of implementing DE emerged as an attempt to improve on the then Correspondence Education. DE by correspondence use to be the sole means of preparing candidates for the General Certificate in Education – a precondition for the London Matriculation Examination. This led to the introduction of a radio programme which became the first indigenous e-learning platform, after which educational TV programmes emerged. At the university level, the first attempt was made by the University of Nigeria, Nsukka (UNN) which started with teacher education programmes. This was followed by the National Teachers' Institute (NTI) in 1976, with the support of United Nations Educational Scientific and Cultural Organisation (UNESCO).¹⁶ In principle, the prevalence of DE and e-learning in particular in most Nigerian universities is fast gaining momentum and National Open University of Nigeria (NOUN) happen to be a major contemporary Nigerian university where it is reasonably implemented.

Worthy of mention is the fact that the practice of e-learning in Nigeria is rooted in the development of telecommunications in 1886 when e-cable was formed by the then colonial authorities to make communication and feedback systems easy. Ever since considerable improvement has been achieved due to the privatization of the telecommunication industry in

the 90s by the Federal Government.¹⁷ Consequently, four (4) telecommunication service providers emerged. They are, Mtel- NTEL, Econet now Vmobile, MTN and CII. Glo eventually secured an operational license as the fifth communication company in Nigeria. With the licensing of more companies in Nigeria, internet access has improved. Paradoxically, it goes to show that the future of e-learning in Nigeria is bright.

For emphasis, the need for e-learning hinges primarily on some of the following clearly identified factors:

1. **High Rate of Poverty:** Nigeria has been rated the poverty capital of the world with almost half of its population living below poverty line. To confirm this, Ajelurou stated that independent reports by the National Bureau of Statistics (NBS) reaffirmed the report of the World Poverty Clock that since 2018, Nigeria has recorded a sustained position of having nearly half of her population living below poverty line. For clarity of purpose, Ajelurou writes: “a report by the World Poverty Clock since 2018 showed Nigeria overtook India as the country with the most extreme poor people in the world.”¹⁸ This vast population may find it difficult or impossible to access full-time admission in conventional universities due to lack of funds or time. The majority of those in this group cannot but rely on e-learning opportunities to continue their studies while working.
2. **Early Marriage:** The cultural system and religious beliefs in Nigeria and Africa at large promotes early marriage thereby depriving many women the opportunity to access university education. It has been reported that “more than a third of girls in Nigeria end up in child marriage, and with 22 million married before the age of 18, the nation has the highest number of child brides in Africa.”¹⁹ The opportunities presented by e-learning makes it possible for those within this bracket to access higher education.
3. **COVID 19 Experience:** The COVID 19 pandemic created so much panic, loss of lives and means of livelihood. This led to the closure of most sectors of the economy including schools. This made the need for virtual education imperative and the most suitable alternative. In other words, Alipio argued that during the COVID 19 pandemic, e-learning has been found to be a critical instrument for efficiently continuing education across all levels.²⁰ Students in educational institutions across the board – mostly private schools continued their studies via virtual means while those without the capacity mounted pressure on the government for increased funding to meet this urgent aspiration.
4. **Other Factors:** Factors such as physical disabilities, remoteness of localities, exorbitant tuition fees in private owned universities have made many Nigerians consider the option of accessing university education through e-learning aided academic institutions.

Adaji, T. O, et al noted that in Nigeria, the most common type of e-learning comes in form of CD-ROM and prerecorded videos which can be uploaded on YouTube or any recognized

platform where it can be accessed by students and other target populations.²¹ Here, what is presented is in form of lectures by the teacher. It can be said to be pretty convenient because learners' study at their own pace and are at liberty to re-play the video repeatedly for a better understanding of course contents. The major problem is that this medium can only be designed for one student per computer. However, with the advent of affordable smartphones and mini-computers, this challenge has been considerably brought to its knees. Some universities adopt the use of internet facilities but this has been frustrated due to epileptic power supply and the high cost of running alternative means of power supply (i.e., power generating set) on campuses. Otherwise, platforms like zoom, google classroom, google-meet etc have become useful interactive media for viable e-learning and virtual education at the tertiary level. Despite these weaknesses, it is on record that few universities like the University of Ibadan, Obafemi Awolowo University, University of Benin, University of Lagos, NOUN, some private universities, among others are equipped with e-learning facilities.²² This is not the case in developed countries where e-learning is common.

Challenges of Virtual Education in Nigerian Universities

It has been stressed beyond measure that virtual education has become a child of necessity in contemporary Nigeria due to the difficulty inherent in the acquisition of university education through conventional means. But the viability of e-learning in Nigeria has been threatened by visible challenges, many of which are socioeconomic in nature. Central to the problem is the question of poor infrastructural development and low access to internet facilities. Specifically, Ajadi et al outlined the following as some of the challenges bedevilling the speedy implementation of e-learning programmes in Nigerian universities.²³

1. Unequal access of university students to relevant technology and the visible case of digital divide due to economic hardship and lack of financial resources. For instance, considering the relatively low income of most Nigerians, many students cannot afford Personal Computers (PC) and Laptops. Some of the few students that are privileged to have PC/laptops are not connected to the internet due to extra costs it may incur.
2. A good number of the students admitted into the university have the problem of technophobia due to poor background in computer education. Hence, students find it convenient to hire experts to help them fill online documents like admission forms., course forms and screening forms due to anxiety, lack of skills or knowledge of computer usage.
3. In third world countries like Nigeria, internet connectivity is very low. In few cities with the prevalence of improved internet facilities, how can students afford the high cost of data and internet facilities?
4. ICT education has not been effectively implemented at the secondary and elementary levels of education even though it is one of the newly introduced vocational subjects. Consequently, it is safe to reinforce the view that only a few university students possess the requisite skills for operating computers.

5. Some students are reluctant or show indifference towards the acquisition of the knowledge and skills associated with computer usage. They would rather prefer to be spoon-fed all the time.
6. Epileptic power supply which is a major feature of the Nigerian state is a major problem bedevilling the effective application of virtual education. What is worrisome is that the problem has become a perennial one and has refused to wither due to corrupt leadership and lack of political will.
7. There is insufficient technical staff in most universities across the country. This has made it difficult or impossible for many students and university institutions in Nigeria to ensure quality maintenance and repair of computers in schools. In effect, virtual education in many universities remains an unrealizable dream.
8. The development and licensing cost of software is quite expensive because they are not locally made to suit the peculiarities of the Nigerian system. Thus, it is not user-friendly and affordable in Nigeria.

Prospect of Virtual Education in Nigerian Universities

To say the least, the foregoing shows that virtual learning is a developmental stride that attracts new challenges for teachers and learners alike. It does not create the kind of environment where the target learning experience can be maximized to the full due to the limited abilities of both teachers and learners. As Vaughan would have us believe, some instructors cannot utilize the online tools in the most effective manner in an environment that allows students to co-construct knowledge through interaction.²⁴ What this means is that those with teacher-centred approach to education are handicapped or cannot be at their best under the virtual system unless they make a transformational shift in their approach to the teaching trade.

Also, Redmond raised concern over a probable problem that may likely occur due to the inherent changes associated with this new approach to education. It challenges the professional competence of the instructor on the use of technology and perhaps reduces his level of prestige.²⁵ To solve these problems, Pelz says the instructor is expected to be abreast with the technicalities of virtual learning and adjust his curriculum and teaching style to a more student-centred approach. To achieve a student-centred educational approach, he suggested that the following ways should be adopted:

- Student-led discussion
- Students find, discuss and share web resources
- Peer assistance and teaching
- Peer grading and review
- Case study analysis as a group where students can learn from each other.²⁶

In addition, Pelz maintained that an effective online pedagogue lecture should open the space for learners to connect, interact freely with teachers and have access to the learning materials.²⁷ What's more? While it is true that virtual education can take place anywhere, regardless of time, place or distance, presence is strongly recommended as a motivating tool for promoting virtual education among learners. This could be in form of social, cognitive and teaching presence. While social presence requires the teacher to create a learning community online where learners can express themselves without any fear of harassment and intimidation, cognitive presence allows students to develop critical thinking ability by engaging in discussions, make inquiries and construct meaning from established ideas. The teaching presence requires the teacher to show commitment online. While helping the students acquire autonomous and independent skills, teachers should make themselves available to answer possible questions, facilitate the internalization of learning objectives, manage virtual classrooms and perform guardian functions.

Recommendations for Effective Implementation of Virtual Education in Nigerian Universities

The effectiveness of virtual education in Nigerian university requires increased funding and sustainable policy framework by government and other relevant authorities. Sadly, this recommendation is coming at the hills of sustained decline in the budgetary allocation for education. At a time when the United Nation (UN) is believed that 26% of a nation's budget should be allocated to education, it is regrettable that only 6.3 per cent of the 2021 national budget is allocated to education. Comparatively, this appears to be the worst in a decade.²⁸ In consideration of the supplementary cost of establishing and sustaining the cost of virtual education in Nigerian universities, university authorities should canvass for increased funding and/or develop alternative models for raising the financial resources required for the incorporation of virtual system in Nigerian universities.

Consideration should be made for the training and continuous retraining of university teachers on computer compliant skills. It has been noted that a good number of university teachers are either hesitant, uncertain about the effectiveness of virtual teaching due to lack of requisite computer and internet complaint skills. Some are, perhaps clouded with the prejudice and erroneous assumption that the new system will be ineffective since it may be inconsistent with the traditional pattern of lecturing or teaching centered approach which they have been used for decades. It is therefore believed that through training and retraining exercise, a lot of university teachers will be motivated to learn, acquire requisite skills for effective presentation of learning contents via virtual means. Meanwhile this orientation and computer/internet-based skill should be extended to the student population, without which the entire process is baseless. Since students are the target beneficiaries, the success of virtual education cannot be measured effectively without their involvement and active participation.

It is a truism that man by nature is a social animal whose survival largely depend on active interpersonal relationship and corporate existence, made possible in whatever community he chooses to belong. The emergence of virtual education is a threat which is fast eroding the school community system and its attendant social symbolism of sustained ethical standards. If

we agree that virtual education at the university is trend that is capable of meeting the ever-emerging demands of functional education and we also agree that conventional university system has a valid means of sustaining social interaction, contacts, relationships and acceptable ethical codes, then the need to consider mechanisms for developing a hybrid of virtual education and conventional university system will certainly be helpful.

Conclusion

It should be stressed that the adoption of virtual education in Nigeria is not only necessary but a major panacea for revolutionary change in the education sector. The strength of the system lies in its flexibility, provision of a variety of learning opportunities and an effective platform for promoting lifelong learning values to university students. Virtual Education or e-learning will also promote Distance Learning programmes which will open the space for indigent citizens, workers who cannot attend conventional universities due to work schedule and those displaced from school due to early marriage and other social factors to access university education. The success of virtual teaching and learning at the university level is largely dependent on stable electricity and a sound ICT base. Hence, concerted effort should be made by government and university administrators to ensure constant electricity and sound ICT base in order to meet the ever-emerging demands of efficient delivery of university education. Some of the visible improvements may include the introduction of modern ICT like e-mail, web-based learning (e.g., the opening of course wares), CD ROMS for delivering course materials etc. For effective actualization, strategies to ensure affordability, the readiness of university students and teachers and other related parameters should be guaranteed. The multiplayer effect is viable human capital development for innovation, creativity and national development.

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