

AWARENESS AND USAGE OF VIRTUAL LEARNING PLATFORMS AMONG LECTURERS AND COLLEGE OF EDUCATION GOAL ACHIEVEMENT IN KWARA STATE, NIGERIA**BY****OTTAN, Jamiu Olatunji (Ph.D.): Educational Foundations Department, Faculty of Education, National Open University of Nigeria, jottan@noun.edu.ng****TIAMIYU, M. Oladimeji: Educational Foundations Department, Faculty of Education National Open University of Nigeria, mtiamiyu@noun.edu.ng****TUMBA, Vandi Rose: Educational Foundations Department, Faculty of Education, National Open University of Nigeria, rtumba@noun.edu.ng****Abstract**

This study investigated level of awareness and utilisation of virtual learning platforms among lecturers in relation to college of education goal achievement in Kwara State, Nigeria. It is a descriptive survey of a correlation type. The study was guided by four research questions raised and one hypothesis formulated. The hypothesis was tested at 0.05 level of significance. The population of the study consisted all the 16 colleges of education in Kwara State out of which eight were selected for the study. From the selected colleges, both purposive and stratified sampling techniques were used to make 322 respondents available for the study. Researchers-designed questionnaires were used to obtain data from the respondents and Students' Academic Proforma (SAP). The questionnaires were tagged "Awareness and Usage Virtual Learning Platforms Questionnaire (AUVLPQ) and Goal Achievement Questionnaire (GAQ). The instruments were validated; 0.74 and 0.68 reliability scores were generated. Descriptive statistics of mean score was used to analyse the research questions and Pearson product-moment correlation coefficient was used to test the hypothesis formulated at 0.05 level of significance. The findings were that: the level of awareness of virtual learning platforms among lecturers were rated high for all the Colleges sampled for the study; the extent of usage of virtual learning platforms among lecturers were rated low; public Colleges of Education were using virtual learning platforms the more compared with private Colleges of Education; students result as measure for goal achievement was bottom heavy in classes of pass for graduation; and significance relationship existed between usage of virtual learning platforms and goal achievement of Colleges of Education in Kwara State, Nigeria. Based on the findings, the study concluded that virtual learning platforms significantly enhanced students' ability to achieve educational goals by providing flexible access to resources and fostering a balanced approach to work and studies. It was, therefore, recommended, among others, that the management should make the school environment an accessible of internet services, this will motivate both lecturers and students to imbibe the culture of virtual learning platforms.

Keywords: *Awareness, Usage, Virtual learning platforms, Lecturers, College of education, Goal achievement*

Introduction

The existence of colleges of education among other higher institutions in Nigeria is premised on the fact that teacher education is prime factor for development of every other profession needed for human capital development of the country. Although, the perceptions regarding the essence of higher education differ significantly among individuals, groups, and nations. In Nigeria, for instance, higher institutions like colleges of education are known as centers of learning, training, and research. They are recognized as institutions where knowledge and skills are acquired and utilized for the greater good (Federal Republic of Nigeria, 2013). The quality of education provided in Nigerian tertiary institutions is demonstrably fundamental to achieving development across all sectors. Education provided at tertiary institutions like Colleges of Education is instrumental in developing a highly skilled and competent workforce.

The National Commission for Colleges of Education (NCCE) as the regulatory body in Nigeria handling affairs of the colleges of education stated that the COEs are one of the higher degree awarding institutions of the Nigeria Certificate in Education (NCE) which offer a range of academic programmes and courses in education-related fields, including Early Childhood Education, Primary Education, Secondary Education, Special Education, Technical Education, Science Education, and other conventional courses in business, social sciences and humanities. The main objective of the colleges of education is to produce competent and well-trained

teachers who can effectively facilitate learning, promote educational development, and contribute to the improvement of the Nigerian education system. The curriculum at that level of learning dives deep into teaching methods, subject expertise, educational psychology, classroom management, and assessment techniques. The NCCE sets the standards, guidelines, and accreditation processes to ensure top-notch teacher education. In most cases, Often, colleges of education collaborate with universities and other higher institutions, which improves their programmes, fosters opportunities for further studies, and promotes professional development.

However, teaching is an artistic and scientific process, and its major components are content, communication and feedback. It is art because it lays emphasis on the imaginative and artistic abilities of the teachers in creating a worthwhile situation in the classroom to enable students to learn. And, it is a science because it sheds light on the logical, mechanical procedures or steps to be followed to attain an effective achievement of goals (Rojogopalan, 2019). Similarly, Ozano (2013) opined that teaching is the systematic presentation of facts, ideas, skills and techniques to students. The role of the teacher who does the teaching can be categories into traditional role (teacher centered) and modern role which is student centered (Facilitator). The traditional role explains that the teacher is seen as a purveyor of information, a fount of knowledge with students sitting in rolls in front of the teacher who passes on the knowledge to them, while in the modern role, the teachers is a facilitator, that is a person who assist the students to learn for themselves in which they might all be at different stages in their learning and in consequence, the learning becomes individualised to suit individual requirements and abilities (Sequeira, 2012). However, for learning to take place successfully to the extent of aiding education to attain its aims, teaching has to be done effectively and efficiently by ensuring that all the phases of teaching are carried out well. These phases are the curriculum planning phase, as instructing phase and an evaluating phase (Hough & Duncan, 2016).

Teaching has traditionally been administered via physical interactions between teachers/lecturers and students in classrooms. Through technological advancement in communication and technology and digital devices, however, online education has been developed with the potential to scale education, making it affordable and accessible. With an internet connection and a laptop or mobile phone, students can access massive open online courses for free. Also, there is an increasing interest in the quality of content delivery and improved pedagogy in higher education institutions. Hence, virtual learning has emerged as a successful, viable learning management platform for teaching and learning in the 21st century.

Information and Communication Technologies (ICTs) are electronic technologies used for the storage and retrieval of information. Due to the convergence and perverseness of ICTs, it has given it a firm role in development and globalization and it is for this reason that ICTs have been evolving since the mid -20th century. Shittu (2013) explain ICT as all forms of evolving technology that helps in facilitating the collection, processing, usage, transfer, storage, sharing and interpreting of information. In the same manner, Oluwarobi (2012) also defined ICT as electronic-based technology that is generally used to retrieve, store, process and package information as well as provide access to knowledge. Various sector of the economy has been affected by ICTs over the last decade and education is not left out of this trend as it has undoubtedly affected teaching, learning and research. Yusuf and Balogun (2011) opened that ICTs have the potential to accelerate, enrich and deepen skills to motivate and engage students, to help relate school experience to work practices, create economic viability for tomorrow's workers as well as strengthening teaching and helping schools change. It is one innovation in education that takes the normal traditional teaching to higher an advanced level as it creates massive improvement in the education. Sector since it has the potential to innovate, accurate, deepen skills, enrich, motivate and engage students to help relate school experiences to practical works as well as strengthening teaching and help schools change positively (Syed, 2010).

It is however for these reasons that virtual learning platforms become millennium development technology driven, every teaching is required to use for efficiency and high productivity in teaching and learning process as the competence of the teacher/lecturer is increase since they make use of ITC prepare lesson plan as well as lesson notes and this will enhance their instructional strategies in the teaching process (Rampersad, Plewa & Troshani 2012). The use of virtual learning platforms is however not meant for certain subject which means that it does not restrict the lecturers in colleges of education based on course taught, therefore it can be applied to the teaching of all subjects as opined by Jean (2017). Virtual learning as a flexible, effective, and inspiring way to

deliver learning content that best suits the needs of students. It is Virtual learning environments that play an essential role by providing users with learning flexibility and unprecedented opportunities to co-create information. Such a platform allows students to study at their own pace (Gunawan, Kalensun & Fajar, 2018), automatically tracking their progress as they collaborate (Barco, 2018). According to Barco (2018) and Bateman (2012), virtual learning environment is a digital classroom where e-learning courses are presented and students learn through interacting, communicating, viewing and discussing presentations, and by engaging with learning resources (Barco, 2018; Bateman, 2012). Bringing more light on the concept of virtual learning, Turoff (2007) says that virtual classroom is a web-based environment that allows students to participate in live training events without the need to travel. Students listen to lectures, participate in lab exercises, ask questions, and receive feedback just as they would do in a conventional classroom – except they do it from the convenience of their desktop or anywhere they have an internet and phone connection.

In this learning process, various technological gadgets are employed to facilitate the teaching and learning processes. Such advanced technologies include internet, e-mail, website, mobile phone, ipod, etc (Mangal & Mangal, 2009). These advanced technologies are variable tools for rendering valuable assistance and good alternative to traditional method of education. Several virtual learning platforms have been adopted by higher institutions of learning although these platforms are in exhaustive. They include, Zoom, Microsoft teams, google hangout (meet), skype, Facebook, WhatsApp, Bamboo learning, google classroom, Docebo, WIZIQ, Adobe captivate, youtube, Elucidat, Blackboard learn among others.

According to Alves, Miranda and Morais (2017), various higher institutions have adopted virtual learning environment to promote and improve teaching and learning. In adopting it. the institutions are increasingly searching for a better means of delivering education for their students. Saykili (2019) attested to the fact that the emerging digital technologies in this industrial age forces higher education institutions to adopt a new educational paradigm. This why against the background of this study set to examine the level of awareness and usage of virtual learning platforms among the lecturers in relation to goal achievement of colleges of education in Kwara State, Nigeria.

Statement of the Problem

Due to exigency of globalization, the world has become a global village where people assess and process information within a twinkle of an eye. Information and Communication Technology has made teaching to be more advancing and all-encompassing especially in advanced countries while less-developed countries are trying to meet up with these innovative ideas. Meanwhile, considering the nature of overcrowded lecture rooms that characterized higher institutions of learning in Nigeria, which is resulting to poor delivery of the curriculum. Barco (2018) observed that there is need for the adoption of virtual learning platforms to improve the quality of content delivery and improved pedagogy in colleges of education. Adopting this instructional method which is learner-centered, would encourage self-paced learning which motivates the present study to examine the extent of awareness and usage of virtual learning platforms.

Moreover, the outbreak of COVID-19 pandemic is an eye opener to appreciate the importance of virtual learning and alternative and more reliable mode of instructional delivery. There are many tools that can create a virtual classroom to enable academic activities to continue without interruption. There are different virtual learning apps in existence, which many developed countries have been benefitting from even before the outbreak of COVID-19 pandemic (CISCO, 2013). However, educational programmes in developing countries like Nigeria were completely shut down both online and offline during the pandemic. The colleges of education were interrupted of academic activities due to the inability to withstand the test of time. And, undermining the significance of virtual learning platforms as means instructional delivery.

Several studies have been carried out in virtual learning and its usage. For instance, Olibie, Ezeome and Ekene (2014) in Anambra State investigated the extent of awareness of virtual learning among students in two public Universities. The findings indicated that a greater percentage of the students were unaware of what constitutes virtual learning and its benefits; these differences in the level of awareness was also viewed based on gender. Binitie, Onochie and Owolabi (2020) worked on the degree of confidence in the use of various virtual classroom apps in teaching in public and private schools in Oshimili, Delta State. Its findings show that teachers are aware

of most virtual classroom tools though not fully using them in teaching but expressed confidence in their use in teaching. It is against this backdrop that necessitate this study to examine the awareness and usage of virtual learning platforms among lecturers in relation to goal achievement of colleges of education in Kwara State, Nigeria.

Purpose of the Study

The main purpose of this study was to examine awareness and usage of virtual learning platforms among lecturers and goal achievement of Colleges of Education in Kwara State. Specifically, the study set to ascertain the:

- i. extent of awareness of virtual learning platforms among lecturers in Colleges of Education in Kwara State;
- ii. extent of usage of virtual learning platforms by Colleges of Education lecturers in Kwara State;
- iii. difference in the usage of virtual learning platforms by colleges of Education lecturers in Kwara State based on school type.
- iv. Level of goal achievement of colleges of education in Kwara State.

Research Questions

The following research questions were raised to guide this study:

- i. What is the extent of lecturers' awareness of virtual learning platforms in colleges of education in Kwara State?
- ii. What is the extent of usage of virtual learning platforms by colleges of education lecturers in Kwara State?
- iii. What is the difference in the lecturers' level of usage of virtual learning platforms in colleges of education in Kwara State based on school type?
- iv. What is the level of goal achievement of colleges of education in Kwara State?

Research Hypothesis

H₀: There is no significance relationship between usage of virtual learning platforms and goal achievement of Colleges of Education in Kwara State.

Methodology

This study adopted descriptive survey research design of a correlation type. The design was considered appropriate for the study because of its focus on the study which gave true description of the variables under consideration. The population consisted all the colleges of education available in Kwara State. There are four public owned colleges of education namely: the Kwara State College of Education Ilorin, Oro, Lafiagi and Nigeria Army School of Education. The private owned colleges of education in Kwara State are: Muhyideen, Nana Aisha, grand-plus, Adesina, ECOWAS, Pan-African, Ilemona, Imam Hamzat, Kinsey, Ajetunmobi and Moje. Making a total of 16 colleges of education in Kwara State. Purposive sampling technique was used select all the public owned colleges and stratified random sampling was employed choose four out of the 12 private colleges of education available in the State. In all, eight colleges of education were made available for the study. In all the selected colleges of education, lecturers were the target population. And, at the time of conducting this study, the population of the academic staff in the eight selected colleges of education in all the departments was 1976. A multi-stage sampling was used to select 322 respondents as this decision was guided by Krejcie and Morgan (1970). The 322 represents 17% of the population. In as much the respondents share similar characteristics in terms of qualifications for employment and promotion, the sampled size of fair enough.

Meanwhile, three set of instruments were deployed to obtain data from the respondents and college authority. The first instrument is tagged as "Awareness and Usage of Virtual Learning Platforms Questionnaire (AUVLPQ)" and second instrument is Goal Achievement Questionnaire (GAQ). Both the "AUVLPQ" and "GAQ" were subjected for content and construct validations by given the draft instrument to experts in the field of educational test, measurement and evaluation and educational technology. A test-retest method of reliability was employed at interval of three weeks for reliability study. And, 0.74 and 0.68 reliability scores were obtained. The third instrument is Student Academic Proforma (SAP) to obtain student results. The data obtained for this research were analyzed using descriptive and inferential statistics. Descriptive statistic of mean score rating was used to answers all research questions raised. The rating of the mean scores for decision making is as follows:

0.00 -1.00 = Very Low, 1.01-2.00 = Low, 2.01-3.00= High, and 3.01-4.00= Very High

Results

Research Question 1: What is the extent of lecturers' awareness of virtual learning platforms in Colleges of Education in Kwara State?

Table 1

Mean score descriptive analysis of level of awareness of virtual learning platforms in Colleges of Education, Kwara State, Nigeria

Colleges of Education	Mean Score	Decision
Kwara State College of Education Ilorin (Central)	2.89	High
Muhyideen College of Education, Ilorin (Central)	2.34	High
Kwara State College of Education, Lafiagi (North)	2.66	High
Laola Shalasi College of Education, Share (North)	2.53	High
Kwara State College of Education, Oro (South)	2.61	High
Pan-Africa College of Education, Offa (South)	2.77	High
Composite Mean Score	2.63	High

Source: Field report, 2024

As revealed in Table 1, the level of awareness of the virtual learning platforms among the Colleges of Education in Kwara State is presented. The mean scores were rated or ranked high for all the colleges. This is an indication that virtual learning platforms are well known among the lecturers in the chosen schools.

Research Question Two: What is the extent of usage of virtual learning platforms by Colleges of Education lecturers in Kwara State?

Table 2

Mean score descriptive analysis of the extent of usage of virtual learning platforms in Colleges of Education, Kwara State, Nigeria

Colleges of Education	Mean Score	Decision
Kwara State College of Education Ilorin (Central)	1.66	Low
Muhyideen College of Education, Ilorin (Central)	0.84	Low
Kwara State College of Education, Lafiagi (North)	1.45	Low
Laola Shalasi College of Education, Share (North)	0.52	Low
Kwara State College of Education, Oro (South)	1.71	Low
Pan-Africa College of Education, Offa (South)	1.22	Low
Composite Mean Score	1.23	Low

Source: Field report, 2024

In Table 2, the extent of the usage of virtual learning platforms are presented among the colleges. The mean scores were rated and ranked low of the all the colleges sampled for this study. By implication, it is a true description of the wide gap for knowing of something and making use of it. Although, there could number of reasons that warranted it. It is worthy to note that, the usage of virtual learning platforms is yet to be given popular attention despite what was experienced during COVID-19 pandemic.

Research Question Three: What is the difference in the lecturers' level of usage of virtual learning platforms in Colleges of Education in Kwara State based on type of school?

Table 3

Mean score descriptive analysis of the difference among the lecturers in the usage of virtual learning platform in Colleges of Education, Kwara State, Nigeria

College of Education by Type	Mean Score	Decision
Public Colleges of Education	1.60	1 st
Private Colleges of Education	0.86	2 nd

Source: Field report, 2024

The findings in Table 3 pointed to the fact that there is wide gap in the usage of virtual learning platforms between private and public Colleges of Education. Noting that public Colleges of Education in Kwara State give more attention to the usage of virtual learning platforms compared to private owned Colleges of Education.

Research Question Four: What is the level of goal achievement of Colleges of Education in Kwara State?

Table 4

Descriptive analysis of the results of the graduated students in selected departments in the chosen Colleges between 2021 and 2023

Colleges of Education	No & % of students graduated with Distinction	No & % of students graduated with Credit	No & % of students graduated with Merit	No & % of students graduated with Pass	Total No & Percentage
Kwara State College of Education Ilorin (Central)	18 (1%)	270 (21%)	897 (69%)	115 (9%)	1300 (100%)
Muhyideen College of Education, Ilorin (Central)	02 (1%)	11 (4%)	203 (75%)	54 (20%)	270 (100%)
Kwara State College of Education, Lafiagi (North)	09 (1%)	21 (2%)	895 (87%)	102 (10%)	1027 (100%)
Laola Shalasi College of Education, Share (North)	07 (2%)	12 (4%)	277 (82%)	18 (6%)	314 (100%)
Kwara State College of Education, Oro (South)	07 (1%)	22 (2%)	878 (90%)	73 (7%)	980 (100%)
Pan-Africa College of Education, Offa (South)	03 (1%)	08 (4%)	178 (84%)	22 (10%)	211 (100%)

Source: Field report, 2024

The percentages of the results of the graduated students are presented in Table 4. As indicated in the Table, percentages of students graduated with Distinction is between 1% and 2%. In fact, only Laola Shalasi had 2% within the year of coverage. For the students that graduated with Credit ranges between 2% to 21%. As the Kwara State College of Education 21% within the year of coverage. The percentage of students that graduated with Merit with the year of coverage ranges between 69% to 90%. And, for those that graduated with pass were within the range 6% to 20%. The analysis showed that the class of the result of students is bottom heavy that upper classes of grades.

Testing of Hypothesis

Hypothesis: *There is no significance relationship between the use of virtual learning platforms and goal*

achievement of College of Education in Kwara State

Table 5

Test for correlation between usage of virtual learning platforms and goal achievement of Colleges of Education in Kwara State

Variables	Mean Score	Standard Deviation	DF	Calculated r-value	p-value	Decision
Virtual Learning Platforms	2.35	0.55	298	0.67	0.01	Rejected
Goal Achievement of Colleges of Education	25.07	09.45				

Tested @ 0.05 level of significance

Source: Field report, 2024

The test for correlation between usage of virtual learning platforms and goal achievement of Colleges of Education in Kwara State is presented and tested in Table 5. The calculated r-value was 0.67 and the p-value was 0.01. Meanwhile, the level of significance was tested at 0.05. This means that there is positive significance relationship between the usage of virtual learning platforms and goal achievement of Colleges of Education in Kwara State, Nigeria. This is statistically expressed as $r = 0.67$; $p\text{-value} (0.01) < 0.05$ sig. This means that the null hypothesis stated that there is no significance relationship between usage of virtual learning platforms and goal achievement of Colleges of Education in Kwara State.

Discussion of Findings

The focus of this study is the influence of awareness and usage of virtual learning platforms and goal achievement of Colleges of Education in Kwara State. Virtual learning platforms offer several valuable benefits that contribute to the achievement of educational goals. They provide flexibility in scheduling, which allows students to balance their studies with other commitments. These platforms also offer a wide variety of programs, making education more accessible to diverse learners. This accessibility can lead to cost savings, as online education often reduces expenses related to commuting and physical materials. Furthermore, online learning can enhance learner performance through targeted skills training and education, which can directly support career development.

Unlike attending a physical campus and learning in person, there are advantages and disadvantages of attending a virtual classroom and learning online. Among the many benefits of online learning, one will find that virtual education allows you to enjoy a more flexible schedule, can reduce the cost of your degree, and can allow you to more easily develop your career alongside furthering your education (Siemens and Downes, 2015). On the other way, there are many pros to online learning, there are cons to consider. Staying on task and being self-motivated can be challenging in its own way; which is part of the reason why online learning isn't right for everyone. By understanding more about the advantages and disadvantages of online learning, you can get a better idea of whether it might be suitable for you and your educational and career goals.

The global trend in technology advancement, education is the first contact when it comes to virtual activities. The lecturers showed high level of awareness of virtual learning platforms as indicated in Table 2. Soyemi, Ogunyinka, and Soyemi (2012) argued that lecturers have been using the virtual platform directly or indirectly in their day-today affairs. Almost all of them are using one social handle or the other. These social handles are been used to communicate, investigate and establish relationships. Although, the extent of usage of virtual learning platforms were recorded low among the lecturers in the chosen schools for the study as indicated in Table 3 of the study.

Significance relationship existed between the usage of virtual learning platforms and goal achievement of Colleges of Education in Kwara State ($r = 0.67$; $p\text{-value} (0.01) < 0.05$ sig.). Saykili, (2019) posited that learning digital technologies in higher education is a process of knowledge generation, and the rapid growth of technology in education has a significant impact on students' learning behaviors, motivation, and knowledge development. Pakistan's remarkable technological breakthrough has increased in the education field. Virtual learning platforms are cost effective solution that allow students to interact with instructors and classmates in

real time. A synchronous virtual classrooms learning system via web conferencing schemes, thereby increasing its usage in higher education settings. Synchronous components assist teachers and instructor in promoting technology-enhanced learning on their campuses. Population explosion and mass educational system in every region of the world brought greater challenges to this method of education. For instance, there is problem of inadequate number of human and material resources to cater for the education of the large population. The population of school age citizen in most places has grown 30 tremendously to the extent that only a small percentage can be offered admission. The student – lecturer and student-classroom ratios have grown to the extent that teaching and learning in the classroom have been less effective.

Conclusion

Virtual learning platforms significantly enhance students' ability to achieve educational goals by providing flexible access to resources and fostering a balanced approach to work and studies. A majority of students reported timely completion of assignments and improved motivation through these digital tools, indicating their positive impact on learning outcomes. Colleges of Education and other higher education institutions have shifted from traditional face to face to online teaching due to Corona virus pandemic which has forced both teachers and students to be put in a compulsory lockdown. However the online teaching/learning constitutes a serious challenge that both university teachers and students have to face, as it necessarily requires the adoption of different new teaching/learning strategies to attain effective academic outcomes, imposing a virtual learning world which involves from the students' part an online access to lectures and information, and on the teacher's side the adoption of a new teaching approach to deliver the curriculum content, new means of evaluation of students' personal skills and learning experience.

Recommendations

Based on the findings, the following recommendations were made:

1. the management of the colleges of education in Kwara State should encourage the usage of virtual learning platforms by providing financial incentives for lecturers to enable them to get data needed;
2. the management of the Colleges of Education should intensify efforts on awareness and usage campaign of virtual learning platforms for both lecturers and students;
3. as part of the logistics, the management should make the school environment an accessible of internet services, this will motivate both lecturers and students to imbibe the culture of virtual learning platforms; and
4. lecturers are advised to be attending capacity building programmes that will improve their proficiency on virtual learning platforms.

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