

e-Technology Platforms on Learning Behaviour of Undergraduate Business Education Students in Federal Universities, South-South, Nigeria

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Abstract

This study was carried out to exploring the influence of emerging e-technology platforms on learning behaviour of undergraduate Business Education students in Federal Universities, South-South, Nigeria. Two specific objectives and two research questions were formulated to guide the study. The descriptive survey research design was used for the study. The population of the study was 225 (300) level Business Education students' of 2022/2023 session in Federal Universities offering Business Education in South-South, Nigeria. A researcher-developed instrument was used in data collection. The data collected were analyzed using the mean statistics in answering the research questions. The findings of the study revealed that LinkedIn, Coursera and Open edX platforms significantly influences undergraduate Business Education students learning behaviour. It was concluded that federal institutions should awaken their consciousness by giving maximum support to e-technology platforms as this will significantly improve and increase the students learning behaviour in Business Education. It was recommended among others, that undergraduate students of Business Education should be more encouraged to integrate e-technology usage in their daily academic endeavours in order to internalize and get more acquainted to its usage every time.

Keywords: Behaviour, Education, e-technology, Learning, Business

Introduction

Information and Communication Technology (ICT) seems to be employed by every organization in their various areas of discipline. In education, a lot of institutions seems to deploy e-technology platforms to stimulate the learning behaviour of students. e-technology platforms seem to cut across contemporary instructional materials that are capable of enhancing learning processes. This involves, processing, storing, printing, retrieving, communicating, connecting, transmitting, transforming, accessing and disseminating information in an accurate and faster manner to both the lecturers, students and the society at large. The term emerging technology or modern technologies, according to Jegbefume and Kifordu (2015), originated from earlier terms such as information technology (IT) and information and communication technology (ICT), which deals with accessing, gathering, manipulating and making available or communicating information. This situation has created opportunities for learners to avail themselves of the different e-gadgets available to support learning. This has helped learners to embrace learning both in local areas and in the urban.

Ejimbe and Okute (2017) defined emerging technologies as tools, platforms, concepts, innovations and advancements utilized in diverse educational settings to serve varied

education-related purposes. Emerging e-technologies are recent tools and ideas used to improve learning activities, instruction and interconnectedness in an educational setting. They help to simplify the teaching and learning process and improve the quality of contents, interactions, and teaching methods. Onyema (2019) opined that the adoption and usage of emerging technologies assist educators and students to interact more outside the classroom and to set up classes at any time and place. These technologies have the ability to modify the teaching and learning processes in such a manner that several learners are accommodated, enhanced research activities as well as improving the academic performance of students and job performance of staff in an academic environment.

LinkedIn is an e-technology platform that has become the most widely used professional network available today that makes it an excellent platform both to network with and learn from skilled people. LinkedIn is a social networking platform designed for professionals and businesses to connect, share information, and network. It provides a digital space for students and other users to showcase their work experience, skills, education, and accomplishments and connect with others in their institution, industry or profession. LinkedIn provides learning and networking among students and lecturers. Baro & Godfrey (2015)

LinkedIn is a social networking platform designed for professionals and businesses to connect, share information, and network. It provides a digital space for users to showcase their work experience, skills, education, and accomplishments, and connect with others in their industry or profession. LinkedIn offers online courses and tutorials on various topics, including business, technology, and creative skills. Students can access analytics and insights on their profile views, connection growth, and content engagement. Students can participate in groups or study work related to their fields or interests, engaging in discussions and networking with others. Overall, LinkedIn provides a powerful platform for professionals and businesses to build their online presence, connect with others, and achieve their career and business goals. Taofeeq and Sola (2021)

Gc-Solutions (2019), sees Coursera as an online learning platform featuring many different subjects across an array of learning formats such as course specialization, professional certificates, degree and tutorials. Coursera prioritizes top quality learning through evidence based online teaching and learning strategies. Coursera provides massive open online courses (MOOCs), professional certificates, micro-credential programmes and online degrees. It was one of the first companies in the MOOC industry to achieve unicorn status. It is being designed specifically for students who want to reap the benefits of studying online without sacrificing university level quality. Coursera 2016. Coursera also provides students with comprehensive information regarding terms of use and privacy policies. The other online entities like Coursera provide students with similar disclaimers, term of use, honor codes, and privacy policies. This is particularly important due to the nature of online education and the common critiques of this new style of course delivery. With Coursera's designed platforms and video lectures from professors, students around the world can gain more knowledge into specific subjects that interest them. Coursera is free

which also helps to educate students who do not have the money to afford tuition at a traditional college or university.

Open edX as an open-source Learning Management System (LMS) is designed for Massive Open Online Courses (MOOCs) and Small Private Online Courses (SPOCs), capable of delivering content to hundreds of thousands of students simultaneously. The platform is used by educational institutions, academies, companies, government and non-profit organizations to offer online courses and training programmes. (Open edX 2023).

Open edX provides analytics and insights on learner's engagement and progress. Open edX has a large community of developers, instructors, and learners who contribute to the platform's development and support. Overall, Open edX provides a powerful and flexible platform for creating and delivering online learning experiences that are accessible, engaging, and effective. Lecturers can also setup classes, post announcement, give assignments and receive feedback messages through these e-learning platforms.

Learning refers to a teaching and learning process that not only focuses on the results achieved by the students but also emphasizes the understanding, intelligence, perseverance and quality of learning. It involves creating a conducive and comfortable learning environment, providing necessary facilities and resources and incorporating research components into the curriculum. Learning is characterized by the ability to generate positive feelings and favorable attitudes towards learning which in turn promotes active engagement and proactive behavior in the learning situation. It also involves strategies such as interrogating information, thinking it through, organizing and linking concepts (Murtikusuma & Alfariasi 2019).

Rea (2017), defined learning as that reflective activity which enables the learner to draw upon previous experience to understand and evaluate the present so as to sharpen the future action and formulate new knowledge. He went further to highlight some features of effective learning as an active process in which the learner relates new experience to existing meaning and may accommodate and assimilate new ideas. Past, present and future are connected although a linear connection is not assumed: un-learning and re-learning may be implied.

Learning is achieved through teaching methods that allows learners to take ownership of their own learning. As often as possible, learners should be able to make their own meanings, choose and plan what they do under a range of circumstances. Learning is a process that leads to change, which occurs as a result of experience and increases the potential for improved performance and future learning. Kim (2020)

Instructional learning theory was propounded by Gagne R. M in 1965. Instructional theory focuses on how to structure materials to promote the education of humans, particularly youths. This theory stipulates that there are several different types or levels of learning. The significance of these classifications is that each type requires different types of instruction. Gagne identifies five major categories of learning: verbal information, intellectual skills, cognitive strategies, motor skills, and attitudes. Different internal and external conditions are necessary for each type of learning.

Gagne suggests that learning tasks for intellectual skills can be organized in a hierarchy according to complexity: stimulus recognition, response generation, procedure following use of terminology, discrimination, concept formation, rule application, and problem solving. The primary significance of the hierarchy is to identify prerequisites that should be completed to facilitate learning at each level. Prerequisites are identified by doing a task analysis of learning or training task. Learning hierarchies provide a basis for the sequencing of instruction. Learning occurs through a series of learning events. Each of the nine learning events are conditions for learning, which must be accomplished before the next in order for learning to take place.

The implication of the theory is that this study addresses the role of instructional technology in learning. When students employ the nine learning events/conditions for learning in learning using a complete instructional package like computer-assisted instruction (CAI), their academic performance level is improved. These goals assist many learners in becoming more organized and staying focused on their learning goals.

E-technology describes any form of pedagogy delivered using digital technology. Such methods incorporate visual graphics, text, animations, videos and audio. In addition, e-technology pedagogy can also facilitate group learning, and the assistance of instructors within specific fields Wan Aziairis (2015). Technology employs knowledge, skills and tools to improve human potentials, to solve practical problems, to modify our environment. It is therefore concerned with the application of science to obtain practical solution to the myriad of human problems.

According to Ratheeswari (2018), in the digital age, the use of e-technology allows students to learn and apply the skills that they need in the 21st Century. Pusvyta Sari (2015), e-technology is an alternative pedagogy for the era of technological development and communication, and students in particular need to adapt. Mat Dawi et al. (2016) found that, in the midst of globalization and the advancement of ICT, technology-based and online learning is highly encouraged. The management of pedagogical processes should be conducted creatively and undergo innovation to facilitate interaction between teachers and students. By interacting online, instructors and educators remain connected with their students notwithstanding being in different locations (Hussain, 2017).

The following are features of e-technology platforms

- i. E-technology platforms are a global initiative which helps building a community along with blended learning with the help of establishing physical networks of space, instructors and learners globally.
- ii. Connect via Social Networking Sites (Google plus, Twitter, Facebook, Blog)
- iii. It allows users to watch short video lectures, complete assessments prepared by various peers, participate in interactive quizzes, and get connected to other fellow learners as well as tutors.

Learning is a common word that has easily been misunderstood. It means different things to different people. Learning, academic, study and research skills are sometimes used interchangeably. Basically, it means acquiring new experiences and ideas and making progress in your life and in society. Students generally confuse studying with learning. Studying and

learning do not mean the same thing. In simple terms, you can study without learning but you cannot learn without studying - structured or unstructured. Learning encompasses the totality of life's experiences. Jiddu (2015), said, there is no end to education. It is not that you read a book, pass an examination, and finish with education. The whole of life, from the moment you are born to the moment you die, is a process of learning. Mwangi-Powell (2015).

Haselgrove (2016) explains learning as a relatively permanent change in behaviour because of experience. This implies that learning brings change, progress and development. Therefore, for learning to take place, you need to understand, acquire and develop learning skills. Whether in the pursuit of your academic programme or degree course or the world of work, learning skills are widely applicable.

The following characteristics are noticeable when learning has taken place:

- i. It produces permanent change
- ii. It involves activities, action and interaction
- iii. It is a continuous process that lasts throughout life
- iv. It involves problem-solving
- v. It involves thinking
- vi. It occurs by experience, conditioning or information acquisition

Technology opens up a new space for learning where students are allowed more freedom and teachers are guides in an exciting new world of almost infinite knowledge.

- i. Collaborative learning: Without effective collaboration between learners and teachers, students often lose motivation due to the perceived lack of community and a sense of shared learning.
- ii. Encouraging active participation: Remote teaching gives learners flexibility you won't find in the traditional classroom setting.
- iii. Engaging Students in New Ways: Online distance learning allows you to move from static learning materials to more dynamic interactive media content.

Business Education can be regarded as a field of study that embodies vocational knowledge and adroitness needed to meet the present day economic crisis and unemployment problem in Nigeria. Business Education is a type of educational programme that can lead to value change in products for the benefits of the citizens in Nigeria. It is a programme that can build sound morals and integrity in families and society. Business Education as believed by Wokocha, *et al* (2020) is a skill-driven programme that instills in its learners the right aptitude to participate and survive in the business world.

Accordingly, Usen, *et al* (2020) explained the concept of Business Education as a programme of studies that seeks to create awareness in different business occupations. Business Education helps to prepare the youths to work in business, be as consumers of goods and services, better citizens, quality business teachers and acquire different adroitness in business. It is a field of study that impacts knowledge, skills and competences to its recipients, enabling employability and advancement in office careers and in running personal business.

Furthermore, Koffi (2022), described Business Education as the education for business and about business. This educational programme, equips the recipients with innovation and

creative skills that would enable them function effectively in the society. It is designed to equip students with the needed skills, knowledge and capabilities for the promotion of innovation of green technology, conservation of natural resources and to be used in the world of work. Based on this, Asuquo (2018) noted that, Business Education should prepare students for the needs of a green economy. That is, preparing students to contribute to the wider sustainability agenda and facilitate learning about planetary boundaries, physical limits and enable students to develop the skills to work the problems and uncertainty around them.

Benefits of Business Education in e-World

Durojaye and Onasoga (2016) identifies some benefits of Business Education as follows:

- i. Business Education inculcates the fundamental qualities needed for the proper management of business, acquisition of knowledge and skills.
- ii. Enables individuals have innovative ideas to connect themselves into various disciplines, invigorates sustainable development of organizations in a planned way.
- iii. Enables students to have a mixture of education and experience relating to business concepts and principles, teaches students the fundamental theories and processes of business.

Above all, the application of emerging technologies into teaching and learning of Business Education programme can enhance tutoring in academic lecture halls, classrooms, laboratories and interactive study places in universities. Boulay (2016).

Statement of the Problem

The emergence of the Corona Virus (COVID-19) pandemic led to complete lockdown across nations of the world including Nigeria and this resulted to negative effects on the educational sector as schools were totally closed down during the period. The traditional university teaching and learning model, reliant on physical classrooms and face-to-face interactions, is no longer sufficient to meet the needs of modern students and society. With the rapid advancement of technology, changing student demographics, and the need for increased accessibility, flexibility and sustainability, universities face significant challenges in delivering high-quality education.

However, the integration of e-technology platforms also raises several concerns, including: Equity and access because not all students have equal access to technology, creating a digital divide. Technical problems can hinder the learning experience. Faculty training and adoption: As well as assessing student learning in an online environment can be challenging. To fully realize the potential of e-technology platforms in learning, universities must address these challenges and develop effective strategies for integration, implementation, and evaluation of e-technology platform.

Purpose of the Study

The main purpose of this study was to determine the influence of e-technology platforms on learning behaviour of undergraduate students of Business Education in Federal Universities, South-South Nigeria. Specifically, the study sought to;

- i. determine the extent of influence of LinkedIn platform on learning behaviour of undergraduate students of Business Education in Federal Universities, South-South Nigeria.
- ii. determine the extent of influence of Coursera on learning behaviour of undergraduate students of Business Education in Federal Universities, South-South Nigeria.
- iii. determine the extent of influence of Open edX on learning behaviour of undergraduate students of Business Education in Federal Universities, South-South Nigeria.

Significance of the Study

The study will be of immense benefit to school administrators as they will benefit from this study as they will have an extensive knowledge of e-technology platforms as it will automate administrative tasks, reducing paperwork and increasing efficiency.

The findings of this study will allow lecturers to deliver online courses, reaching a broader audience and enhancing flexibility. Provide access to digital resources, multimedia content, and educational software, enriching the learning experience, facilitate online assessments, automated grading, and constructive feedback. It will help in playing a sensitive role aimed at the implementation of e-technology platforms into learning.

Research Questions

The following research questions were raised for the study.

- i. What is the influence of LinkedIn platform on learning behaviour of undergraduate students of Business Education in Federal Universities, South-South Nigeria?
- ii. What is the influence of Coursera on learning behaviour of undergraduate students of Business Education in Federal Universities, South-South Nigeria?
- iii. What are the influence of Open edX platform on learning behaviour of undergraduate students of Business Education in Federal Universities, South-South Nigeria?

Methodology

The research design that was adopted for this study was descriptive survey research design. This design is suitable for the work since the researcher will gather data from both primary and secondary sources. The area of the study was conducted South-South Nigeria. The population of the study was 628, undergraduate Business Education students that offer Business Education courses drawn from the Federal Universities offering Business Education in South-South, Nigeria. A sample size of 245 undergraduate Business Education students was drawn from the population. The sample was determined using Taro Yamane formula combined

with simple random sampling technique. A structured questionnaire was used for data collection. Which was based on a four-point rating scale. The questionnaire was developed by the researcher. Questions was designed to get information from the respondent to generate data to address the research objectives. The method of validation was face validity. The method of data collection was by administering questionnaire to respondents. A total of 245 questionnaires was administered to the respondents and 225 was returned. Mean statistics was used in answering the research questions.

Results

The results based on the data gathered for the study were discussed below:

Research Question 1

What is the influence of Linkedin platform on learning behaviour of undergraduate students of Business Education in Federal Universities, South-South Nigeria?

Table 1: Influence of Linkedin platform on learning behaviour of undergraduate students of Business Education n = 225

S/N	Instrument	Mean	SD	Remark
1	Enhancing cooperative learning	1.47	0.51	VLI
2	Students participation while learning	1.63	0.49	LI
3	Setting quality for efficient learning	1.60	0.72	LI
4	Implementing good learning policies	1.43	0.50	VLI
5	Management participation on students learning	1.47	0.51	VLI
6	Getting feedback from students after each session	1.37	0.56	VLI
Aggregate Mean		1.49	0.54	VLI

The data presented in Table 1 showed the mean scores or respondents on the influence of Linkedin on learning behaviour of undergraduate students of Business Education. Using the criterion Mean of 2.50, the analysis of data as responded by students of the institutions shows the mean ranging between 1.37 and 1.63. The aggregated average mean resulted in 1.49 which is below the criterion mean of 2.50. This shows a very low influence of Linkedin on learning behaviour of undergraduate students of Business Education in Federal Universities South-South Nigeria.

Research Question 2: What is the influence of Coursera on learning behaviour of undergraduate students of Business Education in Federal Universities, South-South Nigeria?

Table 2: Influence of Coursera on learning behaviour of undergraduate students of Business Education n = 225

S/N	Instrument	Mean	SD	Remark
1	Students commitment to learning	1.57	0.63	LI
2	Improving quality of learning in students	1.43	0.57	VLI
3	Students personal learning	1.63	0.57	LI
4	How enthusiastic students are about leaning	1.70	0.47	LI
5	Identification of learning deficiency in students	1.63	0.49	LI
6	Learning session for students than classroom setting	1.67	0.55	LI
Aggregate Mean		1.67	0.55	LI

The data presented in Table 2 revealed that the Mean scores of respondents on the influence of Coursera on the learning behaviour of undergraduate students of Business Education. Using the criterion Mean of 2.50, the analysis of data as responded by students of the institutions shows the Mean ranging between 1.43 and 1.70. The aggregated Mean resulted in 1.61 which is below the criterion mean of 2.50. This shows a low influence of Coursera on the learning behaviour of undergraduate students of Business Education in Federal Universities South-South Nigeria.

Research Question 3: What is the influence of Open edX platform on learning behaviour of undergraduate students of Business Education in Federal Universities, South-South Nigeria?

Table 3: Influence of Open edX platform on learning behaviour of undergraduate students of Business Education n = 225

S/N	Instrument	Mean	SD	Remark
1	Bridging the collaboration gap for students	1.40	0.50	VLI
2	Improving students learning efficiency	1.47	0.51	VLI
3	Students rate of assimilation	1.40	0.50	VLI
4	Assessment of students	1.40	0.50	VLI
5	Student self-study	1.50	0.51	LI
6	Learning aids for students	1.43	0.43	VLI
	Aggregate Mean	1.45	0.53	VLI

The data presented in Table 3 indicated that the Mean scores of respondents on the influence of Open edX on the learning behaviour of undergraduate students of Business Education. Using the criterion Mean of 2.50, the analysis of data as responded by the students of the institutions shows the mean ranging between 1.40 and 1.57. The aggregated Mean resulted in 1.45 which is below the criterion mean of 2.50. This shows a very low influence of Open edX on learning behaviour of undergraduate students of Business Education in Federal universities South-South Nigeria.

Findings

The following findings emerged from the study based on the research questions

- There is a very low influence of LinkedIn on the learning behaviour of undergraduate students of Business Education. Thus, there is no statistically significant difference in the mean responses of students on the influence of LinkedIn on the learning behaviour of undergraduate students of Business Education students in Federal Universities South-South Nigeria.
- There is a low influence of Coursera on the learning behaviour of undergraduate students of Business Education. Thus, there is no statistically significant difference in the mean responses of students on the influence of Coursera on the learning behaviour of undergraduate students of Business Education students in Federal Universities South-South Nigeria.
- There is a low influence of Open edX on the learning behaviour of undergraduate students of Business Education. Thus, there is no statistically significant difference

in the mean responses of students on the influence of Open edX on the learning behaviour of undergraduate students of Business Education students in Federal Universities South-South Nigeria.

Discussion of Findings

The study empirically explores the influence of emerging e-technology platforms on learning behaviour of undergraduate Business Education students in Federal Universities, South-South, Nigeria. Two research specific objectives and two research questions were formulated to guide the study. The research design that was adopted for this study was descriptive survey design. This study was conducted in South-South Nigeria. The population of the study comprised of 628 300 level undergraduate Business Education students from Federal Universities in South-South Nigeria offering Business Education courses. A sample size of 245 300 level undergraduate students was obtained using Taro Yamane formula. A structured questionnaire was used for data collection. The method of validation that was deployed was face validity. The research questions were answered using the mean statistics. The finding indicates that:

- i. There is no significant influence of LinkedIn platform on learning behaviour of undergraduate Business Education students in Federal Universities, South-South Nigeria.
- ii. There is no significant influence of Coursera on learning behaviour of undergraduate Business Education students in Federal Universities, South-South Nigeria.
- iii. There is no significant influence of Open edX on learning behaviour of undergraduate Business Education students in Federal Universities, South-South Nigeria.

Conclusion

The study was carried out on exploring the influence of emerging e-technology platforms on learning behaviour of undergraduate Business Education students. Based on the findings of the study, the following conclusions were made; undergraduate Business Education students learning behaviour is significantly influenced by LinkedIn, Coursera and Open edX platforms. Hence it was concluded that all the variables used are factors that can influence the students learning behaviour. Thus federal institutions should awaken their consciousness by giving maximum support and showing interests in the learning behaviour of students as this will significantly improve and increase the students learning behaviour in Business Education.

Recommendations

Based on the findings, it was recommended that:

- i. Adequate attention should be given to up-to-date and make e-technology platforms accessible to undergraduate students of Business Education on relevant information and exchange of ideas that will change their knowledge, skills and attitudes to proper and good usage of e-technology platforms for effective learning.

- ii. Undergraduate students of Business Education should be more encouraged to integrate e-technology platforms usage in their daily academic and non-academic endeavours in order to internalize and get more acquainted to its usage every time.
- iii. E-technology facilities should be made more available, accessible and affordable to students with less bureaucracy so that students would enjoy a more viable, robust, reliable, efficient, effective and cost beneficial educational acquisition.

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