

Students' Perception of Online Learning Management System (LMS)'S Lectures and Examinations in Tertiary Institutions of Nigeria

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Abstract

With the constant advancement of modern day technology, the educational sector has faced constant advances with the digitization of learning like never before. This digitization has led to the popularity of learning management systems; platforms that enable institutions hold lectures, seminars, conferences, and even examinations without having to be present in the four walls of a classroom or lecture theatre. While there are studies that highlight the importance of these platforms, its advantages and disadvantages, there are only a number of studies that focus on the perception of students who use these platforms. In this context, this study analysed the perception of the undergraduate students of Edo State University, Uzairue of online learning management systems' lectures and examinations. The study used a survey and sampled 341 students of the university, and data collected was analysed using table and percentages. The study indicated that the students of the university find the platform relevant in their learning process and are majorly satisfied with the features on the system as well as the activities they partake in on the platform. They acknowledged the presence of challenges on the platform and went as far to proffer solutions for these issues to be tackled.

Keywords: Edo State University Uzairue, examinations, learning management systems, lectures, online learning, students.

Introduction

With the constant advancement of modern day technology, the various sectors of society face constant advancement in one way or the other. The educational sector is not any different and the world has seen the digitization of learning like never before. The role of modern technology in the field of communication is in four folds: 1) technology as part of the curriculum; 2) technology as an instructional delivery system; 3) technology as a means of aiding instructions and; 4) technology as a tool to enhance the entire learning process (1). While there are a number of negative impacts of technology on education as it is a double edged sword, the positive impacts include enhanced teaching and learning through developments such as digital cameras, projectors, mind training softwares, power point presentations and visualisation tools that help both

teachers and students; globalisation which allows students from different parts of the world are able to meet each other through video conferencing without having to leave their classrooms or their states and; the disappearance of geographical limitations which promotes online degrees that people earn without having to be physically present in a classroom and distance learning and online education which have now become very important parts of the educational systems today. The increased access to knowledge is another impact of technology on education (1).

Learning Management Systems (LMS) are "online learning platforms that facilitate the delivery of personalised learning with diverse content to various learners within an organisation or subscribed to the organisation" (2). These platforms also allow the delivery of digital learning and "are

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used by educational institutions and organisations for training their employees in the work place” (2). LMS platforms are “software applications or web-based technologies that are used to plan, implement and assess a specific learning process...and, in its most common form, consists of two elements: a server that performs the base functionality and a user interface (UI) that is operated by instructors, students and administrators” (3). Typically, these LMS platforms provide instructors with ways to create and deliver content, monitor the participation of students and also assess students’ performance. On the other hand, students are provided with interactive features such as discussion threads, video conferencing and forums for discussion on one topic/issue or the other (3).

Although LMSes are primarily used for knowledge management, (3) state that these platforms are also used by various organizations as LMSes can be used for employee training and onboarding, for extended enterprise training, for employee development and retention, for sales training, and for blended learning.

The recent advances in technology and the emergence of internet and web technologies has made tertiary institutions increasingly seek the potential use of information and communication technologies to facilitate their flexible teaching needs; adopting online-course building applications to aid online learning especially in situations where physical meetings in classrooms or lecture theatres are impossible for one reason or the other (4). In Nigeria, the use of these learning management systems has gradually increased in the last decade. Although limited to a few educational institutions at first (particularly those in the private sector) and despite a number of societal challenges such as poor power supply and high internet access tariffs, these learning systems have slowly become implemented in one way or the other in both the public and private sectors of the country as no educational institution can now try to stick to analogue methods in a digital world that evolves at a fast pace, especially in a situation like the COVID-19 pandemic where physical meetings were banned and alternatives had to be quickly provided to meet up with academic deadlines. Among the various learning management systems used in the country are Blackboard,

Edmodo, iLearn, Canvas, LearnPress, LearnDash, e4education, FreshLMS, Moodle, TutorLMS, Open edX and Mini Course Generator.

While there are a number of existing literature on learning management systems in Nigeria, its advantages, disadvantages, and implementation, there is hardly any that seeks to assess the perception of students who use these learning management systems and the content they are provided. This study, therefore, seeks to fill that literary gap by assessing the perception of Edo State University students, focusing on the online lectures and examinations they partake in on the university’s learning management system; Canvas.

The objectives of the study are thus:

1. To determine the extent of relevance of the Canvas Learning Management System in the learning process of Edo State University students.
2. To assess the perception of Edo State University students of online lectures and examinations held on the Canvas LMS platform.
3. To identify the challenges faced by Edo State University students while using the Canvas LMS platform.

The study poses the following research questions:

1. What is the level of relevance of the Canvas Learning Management System in the learning process of Edo State University students?
2. What is the perception of Edo State University students of online lectures and examinations held on the Canvas LMS platform?
3. What are the challenges faced by Edo State University students while using the Canvas LMS platform?

Materials and methods

Conceptual Framework

Online Lectures (E-Learning)

Online lectures, also known as e-learning, is defined as “a system of learning based on formalised teaching but with the help of electronic resources...While teaching can be based in or out of the classrooms, the use of computers and the internet forms the major component of e-learning” which “can also be termed as a network enabled transfer of skills and knowledge, and the delivery of

education is made to a large number of recipients at the same or different times” (5).

The concept is also defined as “anywhere, any-time instruction delivered over the internet or a corporate intranet to browser-equipped learners...Contrary to traditional learning methods, e-learning allows students, employees in training and casual learners to participate in an organized learning experience regardless of their physical location” (6). According to (6), e-learning methods and technology are important both for educating students and also for the professional development of those in the workforce as there is a need to keep pace with the increasingly rapid evolution of technology that affects all parts of society. E-learning allows increased adaptability to the rapidly changing environments (6).

Online lectures can be either synchronous (instructor facilitated) or asynchronous (self-directed and self-paced).

Students

Students are people enrolled in degree-granting programmes (either undergraduate or graduate) at an institution of higher learning and are registered full time in accordance to the definition of their respective academic institutions, and are not employed full-time while running the academic programmes (7).

The term student is usually defined as a person who studies in any shape or form (8). However, the term “student” can also be used as a philosophical term that denotes curiosity, humbleness, and the acceptance of the vastness of knowledge (8).

Theoretical framework

This study is anchored on the Diffusion of Innovation Theory. Developed in 1962 by E.M. Rogers, the theory originated to explain how, over time, a certain idea or product gains momentum and spreads (diffuses) through a specific population or a social system. The end result of this diffusion is that people (who are part of a social system) adopt the new idea, behaviour or product (9). The adoption in mention is “that a person does something differently than what they had previously” (9) and the key to adoption is that people must perceive the idea, behaviour or product as new or innovative, and that it is only through this that diffusion of that innovation is

possible. The main players in the theory are the innovators (those who are open to risks and are the first to try out new ideas), the early adopters (people who are interested in trying out new technologies and establishing their utility in society), the early majority (those who pave the way for the use of an innovation within mainstream society and are part of the general population), the late majority (people who follow the footsteps of the early majority and adopt the innovation as part of their daily life. They are also part of the general population), and the laggards (people who lag behind the general population in adopting innovative products and new ideas) (10).

Methodology

The study employs the quantitative research method, with survey as the data collection technique. Surveys are used as research tools to better understand individual or group perspectives which are relative to a particular concept or topic of interest (11). In this study, survey is used to collect data from the undergraduate students of Edo State University students in order to assess their perception of online learning management system lectures and examinations.

The study’s population covers the undergraduate students of Edo State University Uzairue who make up majority of registered users on the university’s Canvas Learning Management System (LMS). According to the Department of Student Affairs, the institution’s undergraduate population sits at a round figure of 3,000 (three thousand) students across all the available departments and faculties. Using the sampling size formula of Krejcie and Morgan, a sample size of 341 students was reached for this study.

The simple random sampling technique was employed as it gives every member of the study’s population equal chance of being selected, especially with the survey being online based which gave room for easier dissemination. The online questionnaire was shared across various social media platforms and the information from the respondents will be assessed using percentages and displayed in tables.

Results

The study’s questionnaire was shared to the university’s undergraduate population, and responses were collected until the study’s sample size was reached.

Research Question 1: What is the level of relevance of the Canvas Learning Management System in the learning process of Edo State University students?

How often do you use the Canvas Learning Management System for academic work?		
Response	Frequency	Percentage
Always	99	29.1%
Often	80	23.6%
Sometimes	124	36.4%
Rarely	38	10.9%
Never	0	0%
Total	341	100%
How useful do you find the digital tools used within the learning management system?		
Response	Frequency	Percentage
Very useful	254	74.5%
Somewhat Useful	87	25.5%
Not Useful	0	0%
Total	341	100%
To what extent are the lecture materials on LMS useful in your learning process?		
Response	Frequency	Percentage
Very useful	229	67.3%
Somewhat Useful	99	29.1%
Not Useful	13	3.6%
Total	341	100%
Does the Canvas System help in facilitating your learning process?		
Response	Frequency	Percentage
Yes	279	81.8%
No	43	12.7%
Maybe	19	5.5%
Total	341	100%
Relevance is the Canvas LMS in your learning process as a student of Edo State University, Uzairue?		
Response	Frequency	Percentage
Very relevant	248	72.7%
Somewhat relevant	74	21.8%
Not relevant	19	5.5%
Total	341	100%

Research Question 2: What is the perception of Edo State University students of online lectures and examinations held on the Canvas LMS platform?

How would you rate the ease of access to the learning tools within the Canvas System on a scale of 1 (not easily accessible) to 5 (very accessible)?		
Response	Frequency	Percentage
1	19	5.5%

2	6	1.8%
3	124	36.4%
4	124	36.4%
5	68	20%
Total	341	100%

How familiar were you with the LMS before enrolling as a student of the university?

Response	Frequency	Percentage
Very familiar	25	7.3%
Somewhat familiar	62	18.2%
Not familiar	254	74.5%
Total	341	100%

Table 8: How easy is it to navigate through lecture contents on the LMS platform?

Response	Frequency	Percentage
Very easy	80	23.6%
Easy	167	49.1%
Not too easy	94	27.3%
Difficult	0	0%
Total	341	100%

How satisfied are you with the lecture content provided on the LMS platform and its organisations?

Very satisfied	167	49.1%
Somewhat satisfied	142	41.8%
Not satisfied	32	9.1%
Total	341	100%

Have you participated in online classes and examinations (including tests) on the LMS platform?

Response	Frequency	Percentage
Yes	341	100%
No	0	0%
Total	341	100%

Do you find the lectures held online to be comprehensive?

Response	Frequency	Percentage
Yes	205	60%
No	74	21.8%
Maybe	62	18.2%
Total	341	100%

How satisfied are you with the number of topics covered during the online lectures/examinations?

Response	Frequency	Percentage
Very satisfied	149	43.6%
Somewhat satisfied	142	41.8%
Not satisfied	38	10.9%
I have not taken any lecture or examination on the platform	12	3.7%
Total	341	100%

How satisfied are you with the convenience of taking exams online?

Very satisfied	136	40%
Somewhat satisfied	72	20.9%
Not satisfied	80	23.6%

I have not taken any lecture or examination on the platform	53	15.5%
Total	341	100%

How easy is it to submit examinations on the Canvas platform?

Response	Frequency	Percentage
Very easy	180	52.7%
Somewhat easy	99	29.1%
Difficult	25	7.3%
I have not taken any lecture or examination on the platform	37	10.9%
Total	341	100%

How would you rate the time it takes for feedback about your exams held on the platform on a scale of 1 (very little time) to 5 (a lot of time)?

Response	Frequency	Percentage
1	19	5.5%
2	19	5.5%
3	93	27.3%
4	136	40%
5	74	21.8%
Total	341	100%

How helpful do you find the instructions provided for completing exams online on a scale of 1 (not helpful) to 5 (very helpful)?

Response	Frequency	Percentage
1	19	5.5%
2	19	5.5%
3	93	27.3%
4	136	40%
5	74	21.8%
Total	341	100%

How would you rate the speed of grading and exam results online on a scale of 1 (not good/fast) to 5 (very good/fast)?

Response	Frequency	Percentage
1	13	3.6%
2	43	12.7%
3	87	25.5%
4	124	36.4%
5	74	21.8%
Total	341	100%

How satisfied are you with the overall quality of lectures and exams online?

Response	Frequency	Percentage
Very satisfied	136	40%
Somewhat satisfied	186	54.5%
Not satisfied	19	5.5%
Total	341	100%

Do you feel the online management system is convenient for studying for both classes and exams?

Response	Frequency	Percentage
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Yes	229	67.3%
No	56	16.4%
Maybe	56	16.4%
Total	341	100%

Research Question 3: What are the challenges faced by Edo State University students while using the Canvas LMS platform?

Are there challenges that come with using the learning management system?		
Response	Frequency	Percentage
Yes	322	94.5%
No	19	5.5%
Total	341	100%
What challenges are there? (Tick as many as apply).		
Response	Percentage	Response
Network Fluctuations	94.5%	Network Fluctuations
Cost (Expensive registration fee and data plans)	43.6%	Cost (Expensive registration fee and data plans)
Lack of adequate technology	21.8%	Lack of adequate technology
Technological Disturbances	23.6%	Technological Disturbances
Inadequate power supply	40%	Inadequate power supply
The platform not being user-friendly	10.9%	The platform not being user-friendly
Inadequate knowledge of how to use the platform	16.4%	Inadequate knowledge of how to use the platform
No challenges	5.5%	No challenges

Discussion

The study sought to evaluate the perfection of students of online learning management system lectures and examinations. The study focused on the undergraduate student population of Edo State University, Uzairue.

In line with the objectives of the study, it is revealed that the Canvas LMS is majorly relevant in the learning process of the students as the digital tools the system provides is useful in their learning process alongside the lecture materials provided by the course instructors and lecturers. Although majority of the students were not familiar with the system before enrolment in the university, most of them find the learning tools within the system somewhat easily accessible and they (the majority) also find it easy to navigate through the lecture contents on the platform. Every student has participated in an online class and examination (including tests) and majority are satisfied with 1)

the number of topics covered; 2) the lecture content provided; 3) the convenience of taking the examinations online and 4) the overall quality of lectures and exams held online. The online lectures are found to be comprehensive and it is easy to submit examinations on the platform. Feedback on the examinations, the study revealed, takes some time and the study also found that the instructions provided for completing the exams are useful to the students. The speed of examination grading is found to be fast and majority of the students feel as though the online management system is convenient for studying for both classes and exams. Majority of the students agree that there are challenges that come with using the learning management system, the commonest challenge being network fluctuations followed by the expensive cost of registration and purchasing data plans. When asked to list challenges that weren't provided, the responses of the students

included; 1) the late approval of registered courses by the course advisors; 2) delayed notifications from the systems in regard to assignments, quizzes, tests and classes; 3) the lack of ideal place for lectures and exams outside the classroom as “not everyone has a quiet home where they can stay for online classes, while some might get distracted with other activities as the time classes”; and 4) the Canvas app taking a lot of time to work.

When asked to suggest ways to improve the online management system, the students’ responses included; 1) The ICT team doing better to work on improving the application and making it more user-friendly; 2) Getting good network provided in the school’s premises; 3) Effective consideration of provided time limits; 4) Accessibility of school Wi-Fi by every student; 5) Other means of submission (rather than snap and scan) should be considered and “people should be considered as related to various issues while grading”; 6) Provision of adequate power supply; 7) Making the platform more intuitive (with clear instructions and easy to use features), providing more interactive and engaging content (videos, quizzes, and games), offering opportunities for collaborations and discussions, providing a more personalised feedback and support feature, and making the system more accessible to students with disabilities, by providing captioning and other assistive technologies. Other recommendations were workshops to sensitise the students on how to properly use the platform, the use of the platform be reduced, the provision of videos alongside the lecture contents which should be easily accessible, the platform being free as “university students already pay school fees”, and the university concentrating on the challenges being raised by the students and looking deeply into each one.

Conclusion

The study concludes that the perception of online learning management system lectures and examinations by Edo State University Uzairue undergraduate students is significantly positive. Majority of the students, who served as the study’s respondents, acknowledge that the Canvas Learning Management System (LMS) is very much relevant in

their learning process. While their satisfactory levels regarding various aspects of the management system are majorly positive and they believe the platform is convenient for taking exams and lectures, the students acknowledge that there are challenges facing the system which hinder the seamless performance the platform should have.

Therefore, the study recommends the following:

1. Students’ feedback on the usage of the platform should occasionally be scheduled so as to uncover areas that can be worked on (improved) for the betterment of the institution.
2. The institution should work on providing better network conditions and ease the Wi-Fi accessibility process for the students. Power supply should be worked on to. This would solve a major problem for the students.
3. Sensitisation workshops should be held from time to time for the sake of the students to guide them through the steps of using the platform, especially when there are updates which are unfamiliar with the students.
4. The platform should be worked on by the ICT team to make it more user-friendly for the students and also more interactive than it is right now. It should also be made more accessible for people with one disability or the other.

Abbreviations

Nil

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Author Contributions

Wilfred Olley and Ewomazino Daniel Akpor: Conceptualization, Latifah Efua Anavberokhai : Writing, Samson Ighiegba Omosotomhe: Methodology, Fidelis Otebe : Supervision

Conflict of Interest

The authors declare no conflict of interest.

Ethics Approval

The consent of all those who participated in the survey were sought. No respondent below the age of 18 was used.

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