



Exploring Alternative Teaching and Learning Platforms in Post Covid-19

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Abstract

Learning for undergraduate students has experienced a massive change in approach since the COVID-19 pandemic based on a case-study of the National Open University of Nigeria, Gwagwalada study center, Abuja, Nigeria. This shift has been most visible in the e-learning as alternative teaching and learning platform. The problem addressed in this study is the inadequate accessibility and comprehensive utilization of e-learning platforms as alternative to teaching and learning by students at the National Open University of Nigeria. The methodology employed a qualitative research approach to explore alternative teaching and learning platforms in post covid-19 among undergraduate students in Nigeria. It addressed three research questions: What alternative teaching and learning platforms do students use and to what extent? For what purposes do students use alternative teaching and learning platforms? What are the advantages associated with the ethical use of alternative teaching and learning platforms? To achieve the research objectives, an in-depth literature review was carried out, followed by a survey research design method focusing on e-learning as alternative teaching and learning platforms. The population consisted of the undergraduate students at the National Open University (NOUN) of Nigeria, Gwagwalada study center, Abuja, Nigeria. The findings revealed that the e-learning as alternative teaching and learning platforms used by NOUN students include e-mails, Learning Management Systems (LMS), video conferencing tools, and social media platforms with usage percentages, such as, e-mails 97.2%, LMS 75.5%, social media 98.6%, and video conferencing 88.7%. The recommendation therefore is for the NOUN to implement a comprehensive social media integration into its learning management system, enhance ethical principles in the curriculum, and emphasize the importance of academic integrity even in social media.

Keywords: *E-learning, LMS, social media, NOUN e-learning platforms, Covid-19, teaching*

Introduction

The advancement of information and communication technologies in this 21st century has affected every aspect of human life and its effect is evident in the educational sector. The introduction of alternative teaching and learning platforms such as Google Meet, Microsoft Teams, Zoom, Google classroom, Duo, Blackboard,

Kewl, Moodle, A-Tutor, Sakai, or Free conference, has helped students in accessing learning materials globally without boundary or time hindrance (TEQSA, 2021:el; Fang, 2022: 49). knowledge materials can be uploaded as online facilities for the students/learners to download at will. Yakubu and Dasuki (2018:184) noted that electronic

learning is an evolution process in the educational sector which is facilitated by the application of modern technologies in the classroom. Benninck (2004:el) described e-learning as the use of web applications, internet and computer tools in facilitating teaching and learning. The use of e-learning platforms plays a major role in enhancing the process of teaching and learning, provision of access to academic curriculum, minimize the cost of learning, and also enlarge opportunities in education system (Lwoga, 2014:4).

The problem of this study is inadequate accessibility and thorough use of alternative teaching and learning platforms by students at the National Open University of Nigeria, especially during the COVID-19 pandemic that forced an abrupt switch to entirely online academic activities.

A sampling method was used to select 364 respondents, representing, which is 10% of the entire population. Data were collected through questionnaires and interviews, followed by a thematical qualitative data analysis. Instead of conducting a survey across the 103 study centers of the National Open University of Nigeria (NOUN) across the country, this study targeted 10% of its students (346 people) at the Gwagwalada study center due to time and budgetary limitations. The results of this study should enhance the knowledge of how students use e-learning as alternative teaching and learning platform, hence, guiding university administration to incorporate well-known platforms into their systems and integrate ethical principles into the curriculum to uphold academic integrity.

The primary purposes of using alternative teaching and learning platforms are to access academic information and services. The advantages of e-learning as alternative teaching and learning platforms among students include fostering a positive learning environment, improving students' motivation and engagement, promoting convenience and accessibility, ensuring a fair and equitable learning environment, and contributing to the development of critical thinking and problem-solving skills.

Having presented the study overview, the next section, discuss the problem statement and highlight on the research questions

1.1 Problem Statement

During the COVID-19 pandemic, the students of the National Open University of Nigeria NOUN, Gwagwalada study center, Abuja, Nigeria needed to make a big shift to virtual study, despite the gaps in the system and sudden need to move from a sort of contact classes to 100%

online. This study seeks to bridge the existing gap in research regarding accessibility and comprehensive utilization of alternative teaching and learning platforms by students at the NOUN. Therefore, the problem this addressed in this study is the inadequate accessibility and comprehensive utilization of alternative teaching and learning platforms by students at the National Open University of Nigeria. In the light of this, the following research questions were explored: (i) What alternative teaching and learning platforms do students use and to what extent? (ii) For what purposes do students use e-learning as alternative teaching and learning platforms? (iii) What are the advantages associated with the ethical use of alternative teaching and learning platforms?

1.2 Research Question

A pertinent question to this study is:

What is the impact of accessibility and utilization of alternative teaching and learning platforms on students' academic performance at the National Open University of Nigeria?

To solve this research problem, specific questions were formulated to guide the study in achieving the objective.

The following sub-questions were formulated to guide the study.

1. What are the alternative teaching and learning platforms used by undergraduate students and to what extent?
2. For what purpose do undergraduate students use e-learning as alternative teaching and learning platforms?
3. What are the advantages associated with the ethical use of alternative teaching and learning platforms?

The study employed a methodology of qualitative data analysis approach to examine the alternative teaching and learning platforms among undergraduate students in Nigeria. The study made use of qualitative data analysis, interpreting information gathered from interviews and questionnaires using thematic analysis. The researcher was able to find trends and insights into how students used alternative teaching and learning platforms.

The benefits of the study include guiding educators and university administrators in curriculum modifications and system integration. It also helps students by encouraging fair and accessible learning settings that improve academic integrity and engagement. In order to improve platform integration and curriculum updates for academic integrity, this study looks at how ICT and e-learning as alternative teaching and learning platforms have

transformed education, concentrating on 10% of students at NOUN's Gwagwalada study center.

Having presented the research question, and sub-questions of the study, the next section, discuss the background of the National Open University of Nigeria (NOUN), as well as the literature review.

2.1 Background of the National Open University of Nigeria (NOUN)

The National Open University of Nigeria (NOUN) is one of the institutions that adopted e-learning in Nigeria. NOUN was first established in Nigeria on the 22nd of July 1983 for distance and open learning. It was however suspended on the 25th of April 1984 by the government because of its inability to meet up with the set standard. Apparently, it was resuscitated in 2001. Its administrative headquarters was located in the Victoria Island, Lagos State before it was finally moved to its permanent site in Jabi, Abuja (Federal Capital Territory) in 2016.

NOUN as an institution is considered to be the largest university in Nigeria when it comes to student enrolment and national spread. It obtained its license from the National Universities Commission, which is the constituted body that regulates education system in Nigeria. NOUN offers both Distance education and the single open system of education to its learners. Its programme is aimed at making learning available, accessible, and flexible to students at all times irrespective of one's geographical location. It has its study centres in 103 centres across Nigeria geopolitical zones. The NOUN has the necessary human, material resources, including the physical infrastructure with top-notch information and communication technology competencies for teaching and learning which is in line with the best education standards in all accredited programmes. The National Open University of Nigeria (NOUN) iLearn platform portal provide access to the resources of the university for learning e.g online collaboration/virtual classroom platform, support services to students, interaction facilitation tools, social media, tools for studying e.g audio, and video, self-study assessment tools, assignment and test tools, etc. Its e-library is accessible by all bonafide students. The e-library allows students to access ebooks, databases, journal articles, books, theses, internet facilities, and other academic materials. NOUN also developed a platform known as NOUN e-Courseware Free Download which is strictly for the academic purpose with no cost.

2.2 Literature review

The application of information and communication technologies such as the internet for facilitation of

teaching and learning process has become one of the products of evolution. E-learning refers to a form of education that uses digital technology to deliver learning content to students through the internet or other electronic devices. This type of learning allows students to access educational resources and training materials from anywhere and at any time. E-learning as alternative teaching and learning includes a wide range of tools and platforms, such as online courses, webinars, virtual classrooms, educational apps, and multimedia content. According to Kok (2013:20), learning entails the process of obtaining innovative skills for knowledge development which enhances productivity and improvement. E-learning is described by scholars and researchers as the application of information and communication technology, basically to deliver information as well as instructions to the learner or individual as reported by Welsh et al., (2003:246) and Lai (2006). The intention of using technology supported machines is basically for the promotion of teaching and learning. E-learning occurs when the learner applies the internet technology to streamline the learning process by making already existing courses accessible online (Stoltenkamp, 2012:145; Turkey, M., Shahin, A., & Soliman, N. 2020 .p.18). This learning process encompasses every form of learning facilitated mostly by electronic means to offer better opportunities for learners. Pamfilie, Bumbac & Orindaru, (2014:374) opined that e-learning provided access to innovative opportunities in the education system through the development of innovative reasoning as well as promoting interaction and collaboration between students. Another different view of e-learning was given by European Commission (2001) "as the use of new multimedia technologies and the internet to improve the quality of learning by facilitating access to resources and services, as well as remote exchange and collaboration."

From the above definitions, e-learning basically is a broad term for the description of all kinds of learning that apply various forms of modern technologies like the internet as a channel for promoting learning activities. This process is seen as a solution in bridging time and space enabled barrier, as well as geographical location in education. Based on the above definitions, it can be summarised that e-learning is a means of augmenting the classroom learning through the application of various means of technology such as multimedia, internet technologies, as well as several other ICTs. E-learning as an educational system provides opportunity for students to acquire knowledge from institutions without necessarily being physically present on campus.

2.3 E-learning as alternative teaching and learning platforms

Morscheck (2010) described e-learning platforms as a collaborative online service that provide opportunity for the e-learning community to access information, coursework, tools and other digital resources to facilitate educational process and management. E-learning platforms could also be regarded as Learning Management System (LMS), Virtual Learning Environment (VLE), Course Management System (CMS). Examples of e-learning platforms included but not limited to Blackboard, Moodle, WebTrain, Sakai, SecondLife, Sensei, StudyWiz, coursera, edX, Udacity, Khan Academy, Skillshare etc.

2.3.1 Types of E-learning

There are several types of e-learning platforms such as Learning Management Systems (LMS), Massive Open Online Courses (MOOCs), Adaptive Learning Platforms, Collaborative Learning Platforms, Mobile Learning Platforms, Virtual Classroom Platforms, Self-paced Learning Platforms, Microlearning Platforms, Gamified Learning Platforms, Learning Experience Platforms (LXP). Arkorful and Abaidoo (2014:399) submitted that e-learning is classified based on its engagement in education, the level at which it is engaged, as well as the timing, and interaction. They further divided e-learning into two basic types, which consist of computer-based and internet-based.

2.3.2 Purpose of E-learning Platforms

The purpose of e-learning is to provide an online learning experience that allows learners to acquire knowledge, skills, and competencies using digital technologies. E-learning is often used to supplement or replace traditional classroom learning and can be delivered through a variety of methods, such as online courses, virtual classrooms, webinars, video tutorials, and mobile apps. The purpose of the development of e-learning platforms as alternative to the conventional education system is Educational technology, digital literacy, blended learning, and online assessment.

2.3.3 Advantages of ethical use of e-learning platforms

The use of e-learning platforms as alternative teaching and learning ensures that all learners have an equal opportunity to access learning materials and resources, regardless of their background, race, gender, or physical ability (Lwoga, 2014). E-learning platforms that are designed to be accessible to all learners create a fair and equitable environment for everyone. This promotes inclusivity and helps to reduce discrimination and bias, which can negatively affect the learning experience. Use of e-learning platforms encourages collaboration and

cooperation among learners. Learners can share ideas, thoughts, and perspectives in a safe and respectful environment, which can lead to a deeper understanding of the subject matter. This collaboration can take various forms, such as discussion forums, group assignments, and peer feedback, which can enhance the learning experience (Arkorful & Abaidoo, 2015). This also promotes transparency and accountability in the learning process. Learners are aware of the learning outcomes, expectations, and assessment criteria, which can help them to stay focused and motivated. Moreover, e-learning platforms that provide regular feedback and progress reports to learners enable them to track their learning progress and identify areas that need improvement (Smedley, 2010).

Nigeria's largest open and remote learning school, the National Open University of Nigeria (NOUN), was founded in 1983 and resuscitated in 2001. It uses cutting-edge e-learning tools and platforms to offer flexible, easily accessible education all throughout the country. E-learning platforms, such as learning management systems (LMS) and virtual classrooms, encourage cooperation, diversity, and responsibility. They give students equal chances to learn new information and skills while encouraging critical thinking and participation.

Having presented the study background, and literature review, the next section, discuss the research methodology.

3. Research Methodology

This study is qualitative research. With a strong qualitative component, data was collected on the alternative teaching and learning platforms among students. This approach allows the researcher to collect and analyse data through questionnaires and survey methods.

The population of the study consists of all the undergraduate students at the National Open University of Nigeria, Gwagwalada study centre, Abuja. The total number of undergraduates are 3,415 students spread across eight (8) faculties and 48 departments of NOUN. The Convenience Sampling method was used in the selection of 346 participants which represent 10% of the entire population. These participants were selected from the 8 faculties irrespective of their year of study. The researcher used questionnaire, and interview as data collection techniques. The researcher employed thematic analysis to analyse and interpret data for better understanding and easy communication of the result of the findings. Ethical clearance was obtained from the management of the National Open University of Nigeria (NOUN) before the commencement of this research study.

The questions below were extracted from my questionnaire to give readers a comprehensive understanding of the research process.

- i. Have you been exposed to learning through LMS such as Edmodo, Schoology, Moodle, ATutor, Blackboard Learn, etc.?
- ii. Can you conveniently use video conferencing applications such as Zoom, Skype, Google Meet, Cisco WebEx, Microsoft Teams, Slack, etc.?
- iii. How often do you use e-learning as alternative teaching and learning platforms?
- iv. Do you use e-learning platforms to collaborate with your lecturers and colleagues? Do you use e-learning as alternative teaching and learning platforms to access academic information and services, such as course materials?

Having presented the methodology of the study, the next section, discuss the data analysis, and discussion of findings.

The purpose of adding the above few questions to my methodology is to provide context of the study and its relevance, as well as engaging the reader while promoting the research transparency.

4. Data Analysis and Discussion of Findings

This focused on the presentation and the analysis of data collected from the respondents who took part in the questionnaire survey and interview, as well as the discussion of findings.

4.1 Research Question 1: What are the alternative teaching and learning platforms used by undergraduate students?

Table 1: Alternative teaching and learning platforms used by undergraduate students

S/N	Alternative teaching and learning platforms	Total N	SA	A	Total	D	SD	Dissemination
1	I make use of email		221 (78.4%)	53 (18.8%)	274 (97.2%)	2.8 (0%)	0 (0%)	2.8%
2	I have been exposed to learning via Learning Management Systems like Edmodo, Schoology,	282 100%	71 (25.2%)	142 (50.4%)	213 (75.5%)	60 (21.3%)	9 (3.2%)	69 (24.5%)

	Moodle, ATutor, Blackboard Learn, etc						
3	I can use social media platforms such as Facebook, WhatsApp, Telegram etc.	262 (93%)	16 (5.7%)	278 (98.6%)	3 (1.1%)	1 (0.4%)	4 (1.4%)
4	I can conveniently make use of Video conferencing applications such as Zoom, Skype, Google Meet, Cisco WebEx, Microsoft Teams, Slack, etc	116 (41.1%)	134 (47.5%)	250 (88.7%)	30 (10.7%)	2 (0.7%)	32 (11.3%)

Table 1 provides data on the alternative teaching and learning platforms used by undergraduate students of the National Open University of Nigeria (NOUN).

To answer Research Question 1, which focuses on the alternative teaching and learning platforms used by undergraduate students, the finding revealed that the most commonly used alternative teaching and learning tool and the level of familiarity among the respondents is email.

This is an indication that email is mostly used as an alternative teaching and learning communication tool for assignment or coursework-related information dissemination among undergraduate students. The findings also prove that significant numbers of students are familiar with e-learning management systems such as the institution's specific LMS called eNOUN Learning Space or NOUN e-Courseware, Social media is not a typical learning platform, but it is used either formally or informally for academic purposes like information sharing or group discussions among students. Also, a high number of participants affirmed that they can use video conferencing applications such as Google Meet, Zoom, Microsoft Teams, Skype, Slack, Cisco, etc. These

applications are the typical e-learning platforms mostly used for teaching and learning processes. The findings of this study agree with Algahtani (2011) who submitted that both synchronous and asynchronous e-learning systems allow virtual community members to collaborate and share for academic advancement. The findings show that a high percentage of students are familiar with the e-learning as alternative teaching and learning platforms which they basically use for virtual meetings and online classes. Based on the above information, it could be established that undergraduate students are very familiar with different types of digital tools that are used to actualised their academic purposes. The digital tools used by students such as email, and video conferencing applications are invaluable in their academic experiences. This finding will help the management of academic communities, as well as lecturers in planning, designing, and implementing e-learning content and communication strategies that are in line with undergraduate students' preferences and familiarity with the alternative teaching and learning platforms.

4.2 Research Question : How often do you use the e-learning as alternative teaching and learning platforms?

How often do you use the e-learning platforms?

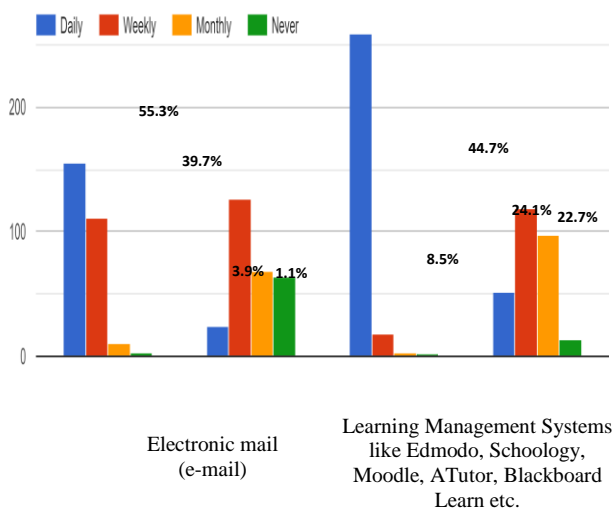


Figure 1: Frequency of E-learning platforms usage (Umera & Baror, 2025) Source: (Umera & Baror, 2025)

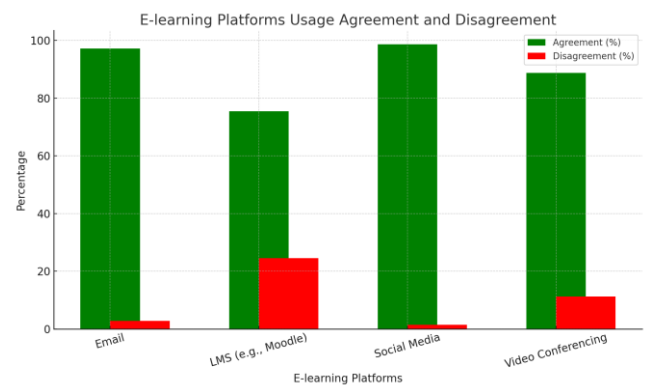


Figure 2: E-learning Platforms usage Agreement and Disagreement (Umera & Baror, 2025)

Source: (Umera & Baror, 2025)

Figure 1, and 2 shows information on how often undergraduate students use various alternative teaching and learning platforms. The findings show that a higher percentage of undergraduate uses email more often, and most of them use email daily. This proves that undergraduate students use email as a communication tool in actualising their academic and personal needs such as interacting with their lecturers, and peers, as well as receiving and sharing course-related information. Furthermore, the study revealed that a significant number of undergraduate students use Learning Management Systems (LMS) and Video Conferencing platforms regularly while the majority of students use it is weekly. This suggests that LMS and Video conferencing platforms are actively used to access assignments, course materials, and other online engagement activities. The findings also provide insight into the widespread daily usage of social media platforms among NOUN students. This suggests that social media is undergraduates' integral part of their daily lives. This shows that social media platforms play a significant role in their communication, group collaboration, and learning process. The result of the study agrees with (2021) study which listed among other things that e-learning platforms are used to provide access to educational resources and facilitate collaboration and communication between peers and instructors.

Based on the findings of this study about the frequency at which undergraduate students use alternative teaching and learning platforms, it could be concluded that email, learning management systems (LMS), video conferencing applications, and social media platforms are frequently used by students with varying degrees. Email, LMS, and Video conferencing platforms are used regularly, while social media platforms are used by the great majority of students on a daily basis. The findings revealed the

commonly used learning tool. This is invaluable for educators when planning and implementing their teaching and learning strategies.

4.3 Research Question 2: For what purpose do undergraduate students use e-learning as alternative teaching and learning platforms?

Table 2: Purpose of the Use of E-learning as alternative teaching and learning Platforms

S/N	Purpose of the use of e-learning as alternative teaching and learning	Total N	SA	A	Total Agreement	D	SD	Total Disagreement
1	To access academic information and services e.g course materials	282 100 %	256 (90.8 %)	26 (9.2%)	282 (100%)	0 (0%)	0 (0%)	0%
2	To upload my assignments for grading and participate in quiz		104 (36.9 %)	137 (48.6 %)	238 (85.5 %)	38 (13.5 %)	3 (1.0%)	41 (14.5 %)
3	To access library resources		170 (60.3 %)	101 (35.8 %)	271 (96.1 %)	9 (3.2 %)	2 (0.7%)	11 (3.9%)
4	To collaborate with my lecturers and colleagues		221 (78.4 %)	57 (20.2 %)	278 (98.6 %)	2 (0.7 %)	2 (0.7%)	4 (1.4%)

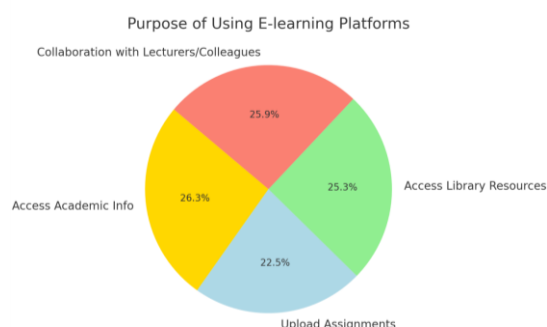


Figure 3: Purpose of Using E-learning Platforms (Umera & Baror, 2025) Source: (Umera & Baror, 2025)

The data from Table 2, and figure 3 provides insights into the various purposes for which undergraduate students use e-learning as alternative teaching and learning platforms at the National Open University of Nigeria. The data collected for this purpose indicates that all surveyed undergraduate students use e-learning as alternative teaching and learning platforms for academic-related

purposes. This is a piece of evidence that e-learning platforms are essential in providing access to students' course-related content, which is vital in achieving their academic goals. Also, the findings prove that a high percentage of students are utilizing e-learning as alternative teaching and learning platforms to access library resources and services. This indicates that the NOUN alternative teaching and learning platforms are facilitating access to the library resources effectively, thereby, supporting coursework and research activities. A majority of 98.6% of respondents in table 1, as well as 25.9% in figure 3 agreed that they use e-learning platforms for the purpose of collaborating with their lecturers and peers. The finding is in agreement with the submission of Morscheck (2010) who stated among other things that e-learning supports the provision of access to educational resources, and facilitates collaboration and communication between peers and instructors.

The above findings validate the claim that e-learning as alternative teaching and learning platforms support academic activities such as accessing course materials and library resources, facilitating collaboration and communication, and fostering a sense of community with the National Open University of Nigeria. This is the reflection of the typical multifaceted nature of e-learning as alternative teaching and learning platforms.

4.4 Research Question 3: What are the advantages associated with the ethical use of e-learning as alternative teaching and learning platforms?

Table 3: Advantages associated with the Ethical use of E-learning as alternative teaching and learning platforms

S/N	Advantages associated with the	Total N	SA	A	Total Agreement	D	SD	Total Disagreement
1	It improved my engagement and motivation towards learning	282	245 (86.9%)	37 (13.0%)	282 (100%)	0%	0 (0%)	0 (0%)
2	It promotes accessibility and convenience of	232	232 (100%)	0	232 (100%)	0%	0 (0%)	0 (0%)

	learning							
3	It ensures a fair and equitable learning environment		224 (79.4)	55 (19.5%)	279 (98.9%)	3 (1.1%)	0 (0%)	3 (1.1%)
4	It contributes to the development of my critical thinking and problem-solving skills		217 (77%)	63 (22.3%)	280 (99.3%)	2 (0.7%)	0%	2 (0.7%)

ii. Promotes Accessibility and Convenience of Learning:

All the respondents affirmed that ethical use of e-learning promotes accessibility and convenience of learning which is particularly important to students who may have other commitments and constraints. This is in line with the findings of Park and Choi (2009) whose findings revealed that e-learning enables adult learners with family responsibilities and full-time jobs to attend classes without risking their job. Ethical use ensures that e-learning resources and materials are available and accessible to all students, regardless of their location or physical constraints. This also supports the submission of Morscheck, (2010) outlined the advantages of e-learning platforms which included but were not limited to accessibility and flexibility of learning.

iii. Ensures a Fair and Equitable Learning Environment:

Almost all the students (98.9%) concur that the ethical use of e-learning as alternative teaching and learning ensures a fair and equitable learning environment. This entails that all students have equal opportunities to access and benefit from e-learning resources, creating a level playing field. This agrees with the findings of Lwoga (2014) that the ethical use of e-learning platforms ensures that all learners have an equal opportunity to access learning materials and resources, regardless of their background, race, gender, or physical ability. This can help in addressing issues of equity and inclusion in education.

iv. Contributes to the Development of Critical Thinking and Problem-Solving Skills:

Almost all the respondents (99.3%) agreed that the ethical use of e-learning as alternative teaching and learning platforms contributes to the development of their critical thinking and problem-solving skills. This entails students' ability to be involved in critical analysis, collaborative problem-solving, and thoughtful discussions in the online environment. These skills are crucial in preparing students for real-world challenges, as well as academic success.

Having presented the data analysis, and discussion of findings, the next section, discuss the study evaluations, recommendations, and the conclusion of the study.

5. Evaluations

The use of e-learning as alternative teaching and learning platforms by undergraduate students is an important aspect of innovation in the education system. As seen in the findings the advantages associated with the use of e-learning cannot be over-emphasized. The study shows that the use of e-learning as alternative teaching and learning platforms improves students' engagement and motivation,

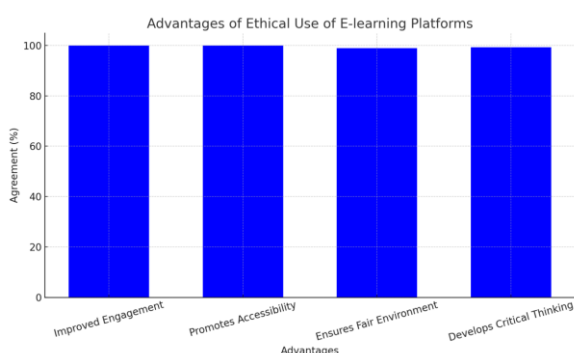


Figure 4: Advantages of Ethical use of E-learning Platforms (Umera & Baror, 2025) Source: (Umera & Baror, 2025)

The data from Table 3, and figure 4 provides insights into the advantages associated with the ethical use of e-learning platforms by undergraduate students at the National Open University of Nigeria.

i. Improved Engagement and Motivation towards Learning:

All the respondents agreed that the ethical use of e-learning as alternative teaching and learning improved their engagement and motivation towards learning. This validates the claim of Wagner et al, (2008) who submitted that the ethical use of e-learning systems is effective in motivating students to collaborate with each other and influence communication without much effort. This means that when students use e-learning as alternative teaching and learning platforms ethically, they are more motivated and engaged in their learning processes such as respectful communication, active participation in class activities, as well as responsible engagement in the online community.

promotes their accessibility and convenience of learning, ensures a fair and equitable learning environment, and contributes to the development of critical thinking and problem solving skills. Using the platforms ethically ensures that students' academic work such as projects, assessments, assignments, tests, quizzes, etc are the true reflection of their efforts and understanding.

This study stands as an exceptional contribution to understanding the e-learning practices in the contemporary educational setting. The study addresses a timely and significant challenge. It investigated the accessibility and utilization of e-learning platforms among undergraduate students at the National Open University of Nigeria (NOUN). The study offers numerous advantages of accessibility and utilisation of e-learning platforms such as ensuring a fair and equitable learning environment, enhanced students' motivation and engagement, and development of critical thinking, and problem-solving skills.

The study uses a qualitative methodology and uses thematic analysis and surveys to gather detailed, complex data. The results are more credible because a large sample (10% of the study center population) was used. Incorporating students from many faculties guarantees that the outcomes accurately reflect the undergraduate experience at NOUN.

This findings indicate that social media is the preferred engagement platform for the NOUN students at the Abuja center

The study made the following recommendations based on the findings and conclusion of the study.

1. Establish a clear and concise code of conduct specific to e-learning platforms, outlining expected behaviors and consequences for violations. Ensure that students are aware of and acknowledge this code.
2. Explore the use of advanced technology, such as AI-powered proctoring systems, to deter and detect cheating during online assessments while respecting privacy concerns.

Conclusion

The findings of this study with regard to the advantages of ethical use of alternative teaching and learning platforms suggest that there are several significant advantages among undergraduate students. These advantages include enhanced motivation and engagement, improved accessibility and convenience, a fair and equitable learning environment, and the development of critical thinking and problem-solving skills. The above advantages highlight the benefit of maintaining and

promoting ethical conduct among undergraduate students in online education.

For further studies, the findings of this study could be to conduct comparative studies across various countries to understand the cultural shift in differences in perceptions of alternative teaching and learning practices, especially as applied to social media platform and other e-learning platforms.

Ethical Approval Declaration

"All procedures involving human participants in this study were conducted in accordance with the ethical standards set by applicable research guidelines and the principles of the 1964 Declaration of Helsinki and its subsequent amendments. Ethical approval was secured before the commencement of data collection."

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This study did not receive any external funding.

Data availability:-

The datasets generated and analysed during the current study will be available from the author upon reasonable request.

Consent for publication:-

I hereby provide consent for the publication of the manuscript detailed above.

Competing interests:-

The authors declare no competing interests

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