

**ACCESS AND UTILISATION OF DISTANCE LEARNING PLATFORMS BY
UNDERGRADUATE STUDENTS OF FACULTY OF EDUCATION IN NATIONAL OPEN
UNIVERSITY OF NIGERIA**

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Abstract

This research was carried out to investigate the Access and Utilisation of Distance Learning Platforms by Undergraduate Students of the Faculty of Education in National Open University of Nigeria. The objectives of the study are to find out: the Distance Learning Platforms that are available; the Distance Learning Platforms that the undergraduate students of the Faculty of Education, National Open University of Nigeria applied, and determine the extent to which undergraduate students of the Faculty of Education of National Open University of Nigeria applied Distance Learning Platforms for information utilization. The study adopted quantitative research methodology and specifically a survey research design. The population comprised of undergraduate students in the six North East Zone Study Centres, Faculty of Education, National Open University of Nigeria. A total number of 8,739 undergraduate students constituted the population out of which 740 undergraduate students were used as samples. Questionnaire was used as an instrument for data collection. Descriptive and inferential statistics were used to analyse the data collected. The study established amongst others that there is significant relationship between access and utilization of Distance Learning Platforms for information utilisation by Undergraduate Students of Faculty of Education, National Open University of Nigeria could be rejected. The study revealed that Portal, Learning Management Systems, Result Management System, E-exams Application System, Project Administration System, e-Counselling Management System, E-Tutor Marked Assignment (TMA) systems and Library Resources Systems are the types of DLP available for information utilization. The study recommended amongst others that there is need for the integration of all Distance Learning Platforms (DLP) for higher educational institutions; and the study has shown the need for orientation to the students on the importance of application of the platforms for their academic pursuits.

Keywords: Distance Learning Platforms, Information Utilization, Undergraduate Students, Faculty of Education, National Open University of Nigeria.

Introduction

Distance Learning Platforms (DLP) are software packages or tools designed, developed and deployed essentially for learning, teaching, and managing information in Open and Distance Learning (ODL) Institutions. Chukwunka (2017), stressed that Open and Distance Learning as a system of education is characterised by physical separation between the instructor or teacher and the learner. Instructional materials in ODL are delivered through a variety of media including print and ICT medium to the learner who may have missed the opportunity earlier in life or have been denied the face-to-face formal education due to socio-economic, family and other circumstance. Okebukola (2013) affirmed that there are three dominant forces responsible for the growth of ODL in Nigeria, among these factors is the emergence of technology. Distance Learning Platforms as a software can be developed as a stand-alone customized application that can be deployed off-line. The current trend in software development indicate that DLPs are Web-based applications which are developed and deployed on-line in which some deployment are real time. Every organisation is at liberty to decide on the option to adopt in line with the organisation's aims and objectives.

The place of Distance Learning Platforms in Open and Distance Learning (ODL) institutions such as National Open University of Nigeria (NOUN) cannot be over emphasised especially in a society where Information and Communications Technology (ICT) is speedily penetrating every sphere of our human endeavours. The emergence of electronic resources, according to Ani and Edem (2012), has tremendously transformed the handling and management of information in Nigerian academic environments.

The core mandate of NOUN is the provision of access to higher education in Nigeria. In an effort to achieve this, the NOUN has deployed technology-mediated learning via several Distance Learning Platforms to enable her students, especially the undergraduate, undertake their studies successfully. This is based on the understanding that technology can be a powerful tool for transforming learning. NOUN in-house application development team has developed and deployed a number of DLPs such as: Students' Portal, Project Administration Systems, Learning Management Systems, E-exams Application Systems, e-Counselling System, E-Tutor Marked Assignment (TMA) Systems, Library Resources Systems, Result Management Systems, etc. These applications are domiciled in various silos within the University domains. The Distance Learning Platforms have the benefits of managing the peculiarities and uniqueness of ODL institutions in the disseminated vital information to relevant parties in the establishment, enlighten various stakeholders in the system. Also, DLPs provide services to prospective students, clients and visitors, databank for the organisation, enhance workflow processes in an establishment and aggregate and promote the corporate image of the organisation.

Considering the fact that all these software applications, resources, tools and websites mentioned above are funded by the University; and these Distance Learning Platforms are designed, developed and deployed in-house by staff; It is only appropriate to put in place necessary measures that will optimize the overall benefits of the Distance Learning Platforms in the University for the End-users (students, academic and non-academic staff and other stakeholders). In other words, the Distance Learning Platforms are expected to enhance the teaching and learning objectives of both the instructors and learners respectively.

Statement of the Problem

Distance Learning Platforms (DLP) also referred to as Electronic Distance Learning Tools are specially customized to handle the peculiarities of distance learning environment or institution. Thus, NOUN has for a long time deployed the DLPs for teaching, learning and other academic activities. Like their global counterparts, students enrolled in NOUN programmes are expected to effectively access and utilise the different component or parts of the DLPs for different academic activities. However, Preliminary study indicates that the ratio of enrolment of students to the number of students that complete their programmes is given as 7:3 by the University (NOUN Academic brief 2014). This means that for a 100% students enrolment in the University, only 30% are able to complete their studies as at when due. Thus, 70% of the students' enrolment are unable to progress in their programme. Thus, stakeholders are concerned about this abnormal curve and are worried. Several reasons ranging from the complexity in the University ODL instructional delivery methodologies to behavioural issues on the part of the learners could perhaps be the cause of the 70% students' slack of progress in their programme. This assertion is confirmed by some practitioners who believe that the Distance Learning Platforms used in the University are too complexity for her prospective students. Therefore, it is an attempt to address this concern of stakeholders of finding out the factors that are responsible for this lack by students' progress in their programmes that this study set out to investigate whether the end-users of the DLPs deployed by NOUN have access and utilise all the component parts of the DLPs for academic purpose. To achieve this general objective of the study, the study focus on Undergraduate students of the faculty of Education.

Objectives of the Study

The specific objectives of this study are to:

1. the Distance Learning Platforms that are available to Undergraduate Students of Faculty of Education, National Open University of Nigeria for academic activities
2. determine the extent to which undergraduate students of the Faculty of Education, National Open University of Nigeria utilize the Distance Learning Platforms for academic activities.
3. find out the challenges of undergraduate students of the Faculty of Education, National Open University of Nigeria utilize the Distance Learning Platforms for academic activities.

Literature Review

Open and Distance Learning provide learning opportunities in a fashion that separate the teacher from the students with regards to time or place or both. Jegede, (2006). Chukwuka (2017), defines Distance Learning as a system of education characterised by physical separation between the instructor or teacher and the learner in which instructional materials are delivered through a variety of media including print and other ICT medium to the learner who may have missed the opportunity earlier in life or have been denied the face-to-face formal education due to socio-economic, family and other circumstance.

Radovan (2014) study show that Digital Distance Learnings available on the internet have become very important in higher education institution around the world. Students at different universities use the digital content on a daily basis yet many aspects of the digital distance learning platforms in use are unknown. This research confirmed the continuous use of

the digital Distance Learnings platforms by the group of students at the Faculty of Humanities and Social Sciences (FHSS) in Zagreb, Croatia (FHSS) who participated in the research.

A study by Salubi, Okemwa and Nekhwevha (2018) stated that “A preponderance of individuals in this generation have widespread access to and use of the Internet and digital media from an early age” which give them the opportunity to access the DLP through the URL of the institutions library. This ideal in this study is particular relevant to open and distance learning institution that depend heavily on the use of DLP for her instructional delivery to learner. As an ODL institution, the National Open University of Nigeria is determined to meet the following objectives that necessitated the establishment of distance education in Nigeria:

- Provision of higher education for all and promotion of lifelong learning
- Cost effectiveness
- Flexibility of delivery system
- On the job teacher training
- Poverty eradication, vocational and lifelong education
- Provision of non-formal education and reaching the unreached

For the purpose of this study, six mutually exclusive Distance Learning Platforms of the University are to be reviewed. Students’ portal, it is a student database management system which is an automated record management system that enables the users or stakeholders to access relevant information at any place and any time through the internet. The DLPs also contain University Library Management System. This is an application that exit mutually exclusive from other software applications in the University. The University Library Management System attempts to reduce or eliminate the burden of manual system by providing a user friendly, fully automated and a secured system for search and retrieval purposes. The System, according to Sejzi, and Arisa (2013). Learning Management Systems (LMS) plays a central role in the Web-based e-learning scenario of educational institutions because it connects learning contents and learners together as well as instructors in a standardized manner. Also, it manages users, learning materials (in the form of objects in Content Management System) and learning events. Another component part of DLPs is the University e-Counselling Management System. This is a DLP components intended to reach out to students or engage them online in respect to their counselling needs. With this application in place, students can get counsel virtually from designated Students’ Counsellor. The fourth component parts of DLPs is the University Result Management System. This system allows the university assignments, examines and other types of evaluations of learners remotely. The students can equally access their results through the system. The last but not the least component of DLPs is University Human Resource Management System (HRMS). The systems and processes at the intersection between human resource management (HRM) and information technology. Rue and Byars (2004), see HRM as “activities designed to provide for and coordinate the human resources of an organization.” as contained in Adeniji and Osibanjo (2012). From the paper, the following are the advantages of computerized human resource systems: easy access to the data, user-friendliness, reliable and flexible, data alteration is easy (Controlled and monitoring), maintenance of the application is easy (Appropriate Update as at when required), reduced manual work – Minima human handling of records and timely and comprehensive report generation.

Furthermore, Bello, Elshafie, Yunusa, Ladan, Suberu, Abdullahi., & Mba. (2017) in their study on Utilization of Information and Communication Technology among Undergraduate

Nursing Students in Tanta University, Egypt, affirmed that the majority of the students utilized ICT in performing their study assignments and research, most of them used smart phones with internet access and had e-mail account. Also, the use of ICT to enhance or support learning and teaching has become increasingly important in education. Information and communication technology in education is a modern, efficient and cost-effective process and has created a need to transform how students and teachers from higher institutions learn and teaches respectively. The traditional delivery system for higher education has been a classroom setting with a teacher giving a lecture and students listening and writing notes. A face-to-face interaction between the teacher and students has been seen as an essential learning element within the learning environment. The explosive development in information and communication technology challenged the traditional model by offering unlimited opportunities in the educational systems in general and in higher education institutions in particular. It permits the designing and production of e-courses, it is claimed that students can learn more from e-learning than through traditional classroom methods, perhaps because students become more involved in the learning process through interactivity. Flexibility is a key characteristic of e-learning, since it promotes learner autonomy and learner choice about how, when and where to study.

Methodology

The research methodology adopted for this study is quantitative methodology and specifically cross sectional survey research for the study. Aina (2004) asserted that survey research is a systematic and comprehensive collection of information that reflects the opinions, attitudes, feelings, beliefs and behaviors of people on an issue quantitatively. The population of this study comprised of the entire undergraduate students of NOUN that are active in the North-east Nigeria numbering seven-thousand, four hundred and thirty-four (7,434), out of which 743 (10%) of the population was selected as sample. This is in line with Conroy (2018) who stated that a good maximum sample size is usually around 10% of the population, as long as this does not exceed 1000.

The research instrument used for collecting data was questionnaire. It was used due to its advantages as recommended by Aina (2004) that, questionnaire as an instrument for data collection was used in descriptive or survey research as it is more economical in terms of time, effort and money.

Findings and Discussion

Out of the 743 questionnaire distributed, 730 was returned and duly completed. Analysis of the findings and discussion were done along the five objectives of the study, which are presented below:

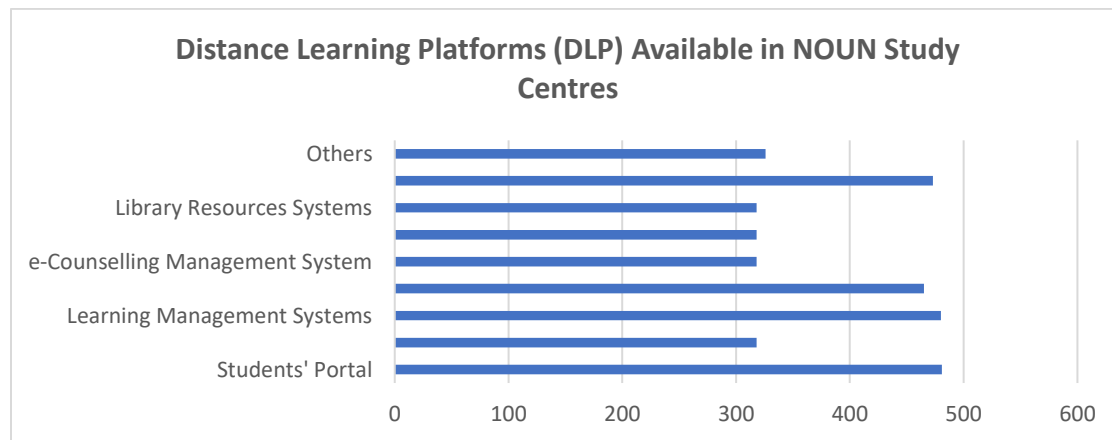
Table 1: Distance Learning Platforms (DLP) Available in NOUN Study Centres

S/N	DLP in NOUN Study Centre	Selected NOUN Study Centres													Total	%	Rank
		YSC		BSC		MSC		DSC		JSC		GSC					
		Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%				
1	Students' Portal	54	11.2	164	34.1	79	16.4	68	14.1	73	15.2	43	8.9	481	65.9	1st	
2	Project Administration Systems	32	10.1	122	38.4	58	18.2	42	13.2	41	12.9	23	7.2	318	43.6	6th	
3	Learning Management Systems	54	11.3	164	34.2	79	16.5	67	14.0	73	15.2	43	9.0	480	65.8	2nd	
4	E-exams Application Systems	54	11.6	156	33.6	71	15.3	68	14.6	73	15.7	43	9.3	465	63.7	4th	
5	e-Counselling Management System	31	9.8	124	39.0	52	16.4	40	12.6	38	12.0	33	10.4	318	43.6	6th	
6	E-Tutor Marked Assignment (TMA) Systems	34	10.7	132	41.5	48	15.1	39	12.3	36	11.3	29	9.1	318	43.6	6th	
7	Library Resources Systems	42	13.2	128	40.3	46	14.5	37	11.6	35	11.0	30	9.4	318	43.6	6th	
8	Result Management System	52	11.0	163	34.5	74	15.6	68	14.4	73	15.4	43	9.1	473	64.8	3rd	
9	Others	31	9.5	112	34.4	54	16.6	52	16.0	53	16.3	24	7.4	326	44.7	5th	

Source: Field survey, 2020

Key: YSC = Yola Study Centre; BSC = Bauchi Study Centre; MSC = Maiduguri Study Centre; DSC = Damaturu Study Centre; JSC = Jalingo Study Centre; GSC = Gombe Study Centre

Fig 1. Distance Learning Platforms available NOUN Study Centres



Find out the Distance Learning Platforms that are available to Undergraduate Students of Faculty of Education, National Open University of Nigeria for academic activities. The study revealed that the available for Information Utilisation by Undergraduate Students of Faculty of Education National Open University of Nigeria are: Students' Portal, Project Administration Systems, Learning Management Systems, E-exams Application Systems, e-Counselling Management System, E-Tutor Marked Assignment (TMA) Systems, Library Resources Systems and Result Management System. The Students' Portal ranked first among the available DLP accessed and utilized by Undergraduate Students of Faculty of Education National Open University of Nigeria. This finding is in tune Anil et al (2012) observation that electronic

resources are tremendously transforming the handling and management of information in Nigerian academic environments and university libraries in particular.

Determine the extent to which undergraduate students of the Faculty of Education, National Open University of Nigeria utilize the Distance Learning Platforms for academic activities.

Table 2: Extent to which undergraduate students of the Faculty of Education, National Open University of Nigeria utilize the Distance Learning Platforms for academic activities

DLP utilisation of ODL programme	Highly Utilised		Moderately Utilised		Indifference		Rarely Utilised		Not Utilised		Mean	Std dev
	F.	%	F.	%	F.	%	F.	%	F.	%		
Students' Portal	166	22.6	129	17.5	181	24.6	137	18.6	123	16.7	3.1	1.39
NOUN Result Application	4	0.5	122	16.6	182	24.7	147	20.0	281	38.2	2.2	1.14
NOUN Online Facilitation Application	4	0.5	122	16.6	195	26.5	292	39.7	123	16.7	2.4	0.97
Tutor Marked Assignment (TMA) Application	167	22.7	129	17.5	180	24.5	137	18.6	123	16.7	3.1	1.39
Application - e-Exams	176	23.9	122	16.6	181	24.6	135	18.3	122	16.6	3.1	1.40
Project Administration Systems	3	0.4	122	16.6	189	25.7	143	19.4	279	37.9	2.2	1.14
NOUN e-Counselling Management Application	2	0.3	121	16.4	179	24.3	151	20.5	283	38.5	2.2	1.13
NOUN e-Library Application	3	0.4	121	16.4	197	26.8	293	39.8	122	16.6	2.4	0.97

Source: Field survey, 2020

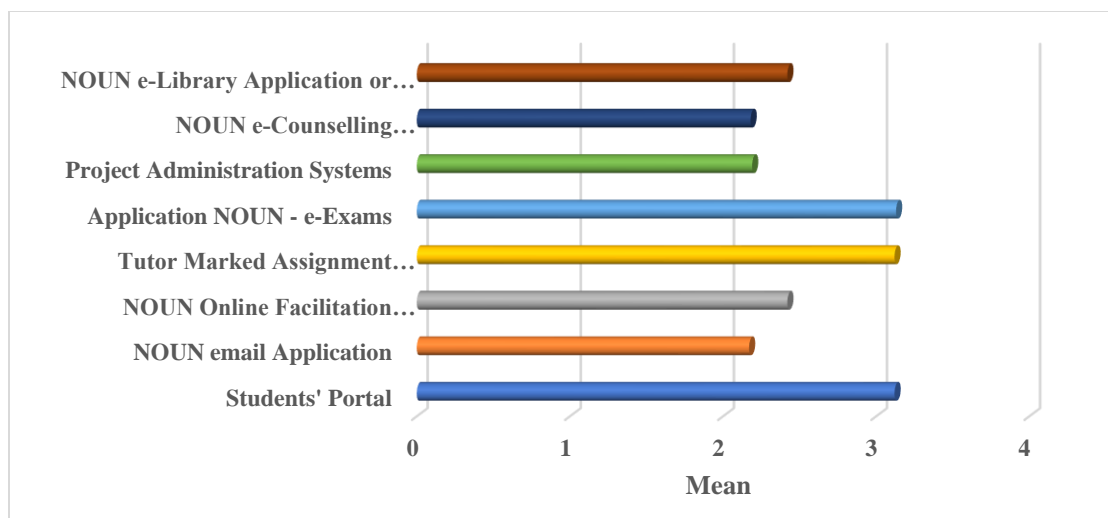


Figure 2: Extent of Distance Learning Platforms for Information Utilisation by undergraduate students in the NOUN Study Centres

Table 2: established that the extent of Distance Learning Platforms for Information Utilisation by undergraduate students in the NOUN Study Centres was found to be below average. The only Distance Learning Platforms that were just of average utilization were Students' Portal, Tutor Marked Assignment (TMA) Application and Application NOUN - e-Exams. Others like NOUN Result Application, NOUN Online Facilitation Application, Project Administration Systems, NOUN e-Counselling Management Application and NOUN e-Library Application or Library Resources Systems did not receive adequate utilization by the students in the Study Centres. This findings is supported by Bello et 'al (2017) research on "Utilisation of Information and Communication Technology (ICT) among Undergraduate Nursing Students in Tanta University, Egypt. The study hold that majority of the students utilized ICT in performing their study, assignments and research.

Table 3: Challenges of undergraduate students of the Faculty of Education, National Open University of Nigeria utilize the Distance Learning Platforms for academic activities

S/N	Challenges encountered in access and use of DLP by undergraduate students in the NOUN Study Centres	NOUN Study Centres													
		Yola Study Centre		Bauchi Study Centre		Maiduguri Study Centre		Damaturu Study Centre		Jalingo Study Centre		Gombe Study Centre		Total	
		Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%
1	Internet availability	32	9.7	125	37.9	59	17.9	51	15.5	40	12.1	23	7.0	330	45
2	Poor User Interface of Application	41	8.9	209	45.3	72	15.6	62	13.4	42	9.1	35	7.6	461	63
3	Poor User Multiple Login to many websites	44	9.6	204	44.4	75	16.3	61	13.3	40	8.7	35	7.6	459	62
4	High Cost of Band width	42	9.0	209	44.8	76	16.3	62	13.3	42	9.0	36	7.7	467	64
5	Lack of awareness of available resources	41	8.9	209	45.3	72	15.6	62	13.4	42	9.1	35	7.6	461	63

6	Lack of Technical Support Services	33	10.2	122	37.7	54	16.7	52	16.0	38	11.7	25	7.7	324	44.0
7	Lack of documentation of Applications	43	9.5	201	44.4	71	15.7	49	10.8	52	11.5	37	8.2	453	62
8	Inability to use the system due to ignorance	32	9.9	122	37.7	54	16.7	52	16.0	38	11.7	25	7.7	324	44.0
9	Low level of Information and Communications Technology (ICT) literacy	34	10.3	121	36.7	55	16.7	53	16.1	39	11.8	28	8.5	330	45
10	Phobia for ICT devices and platforms	41	9.2	202	45.5	67	15.1	59	13.3	43	9.7	32	7.2	444	60.0
11	High cost of ICT devices	43	9.7	204	45.9	69	15.5	58	13.1	45	10.1	34	7.7	453	62
12	High frequency of platforms upgrade	33	10.2	120	37.0	53	16.4	53	16.4	37	11.4	28	8.6	324	44.0
13	Hugh academic course work demanding for limited time	64	11.1	196	33.9	94	16.2	85	14.7	83	14.3	57	9.8	579	79
14	Poor response time to inquiries from the platforms	39	8.8	205	46.3	65	14.7	62	14.0	43	9.7	29	6.5	443	60
15	Lack of encouragement by our institution	40	8.9	202	44.8	70	15.5	58	12.9	46	10.2	35	7.8	451	61
16	Complexity of the platforms discourage it use	43	9.7	204	45.9	69	15.5	58	13.1	45	10.1	34	7.7	453	62

Source: Field survey, 2020

Keys: Fq = Frequency; (%) = Percentage

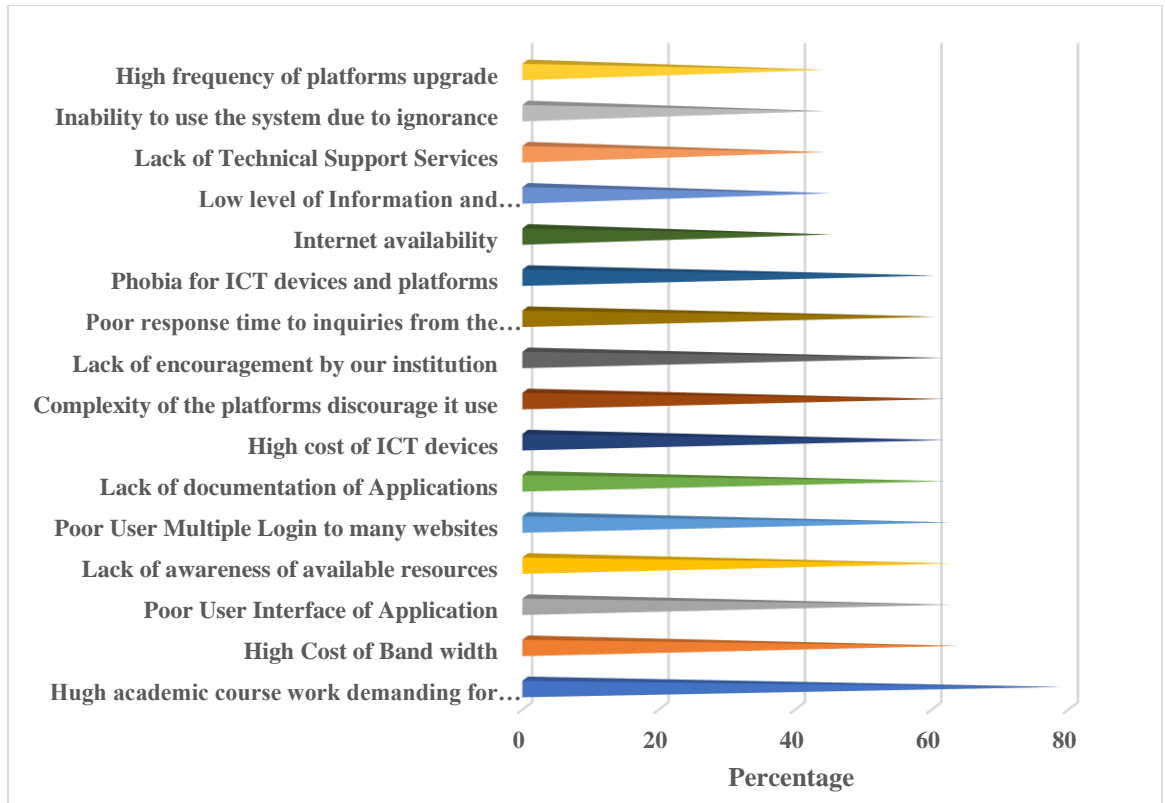


Figure 3: Challenges of undergraduate students of the Faculty of Education, National Open University of Nigeria utilize the Distance Learning Platforms for academic activities

Table 3: revealed the challenges of undergraduate students of the Faculty of Education, National Open University of Nigeria utilize the Distance Learning Platforms for academic activities. The challenges the respondents encountered in the access and utilization of the Distance Learning Platforms for Information Utilisation by undergraduate students in the NOUN Study Centres were tabulated in a dichotomous basis in frequencies and percentages in Table 4 below. The positive affirmations are graphically illustrated in Figure 4. Based on the various reflections of the respondents it can be infer that the Challenges associated with the access and use of Distance Learning Platforms by Undergraduate students of the Faculty of Education, National Open University are similar which are essentially categorized into four broad groups: (a) Institutional, (b) Instructors (c) Learners (d) Societal Influence.

In essence, the challenges to access and utilization of Distance Learning Platforms for academic programmes by undergraduate students in the NOUN Study Centres; the study revealed a number of vital challenges facing the undergraduate students in their access and utilization of the Distance Learning Platforms in the NOUN Study Centres ranging from too much academic workload, cost of Bandwidth, cost of ICT devices, poor User Interface of Applications, inadequate capacity of Server which made Multiple Login problematic and complexity of the platforms among others. Certainly these challenges has implication for students and are capable to constraining the access and utilization of Distance Learning Platforms for academic programmes.

Summary of the Findings

The following were the findings of the study:

1. The study shows that most undergraduate students of the Faculty of Education, National Open University of Nigeria access the distance learning platform using their personal mobile devices.
2. The study revealed that Students' Portal, Learning Management Systems, E-exams Application System and Library Resources Systems are Distance Learning Platforms that are mostly utilised by the undergraduate students of the Faculty of Education, National Open University of Nigeria for their academic activities.
3. The study shows that the challenges of access and utilisation of distance Learning Platforms by the undergraduate students of the Faculty of Education, National Open University of Nigeria are essentially similar to the challenges encountered by students of other higher educational institutions.

Conclusion and Recommendations

The study concluded that the types Distance Learning Platforms available could determine the level of access and utilization by undergraduate students in the NOUN Study Centres. Also, the available Distance Learning Platforms has the capacity to determine the extent of access and utilization by undergraduate students in the NOUN Study Centres. In addition, the volume of challenges encountered by students can significantly impact on the access and utilization of the distance learning platforms. The study recommended amongst others that there is need for the re-orientation the end-users (students and instructors) on the use of all the Distance Learning Platforms (DLP) as provided by the university. The study recommend that the DLPs should be upgraded to a mobile app level so that students can easily utilize it on their mobile devices. The study recommend that concert efforts should be made to curb the challenges of access and utilization of the distance learning platforms as enumerated by the students.

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