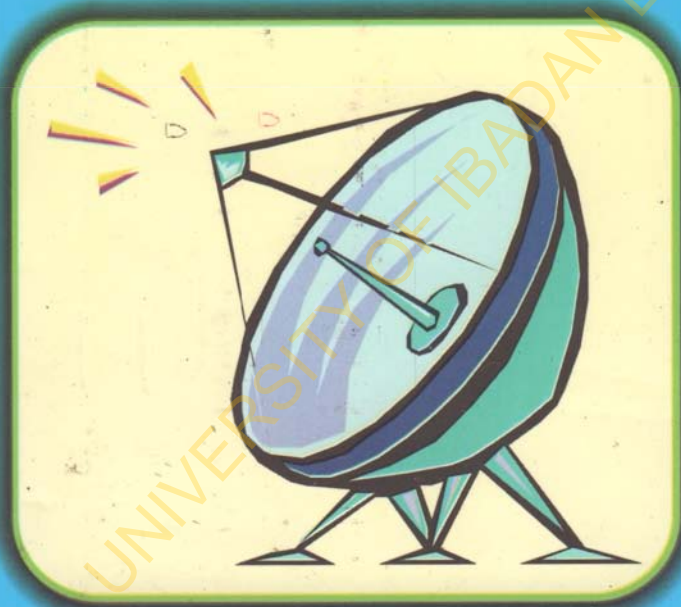


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## TABLE OF CONTENTS

1. Prospects, Problems And Profits Of ODL Tertiary Education in Sub-Saharan Africa - *Prof. Dele Braimoh* .....1
2. The Challenges of Open Distance Learning in the Developing World - *Abiola Odejide*.....20
3. Age, Sex and Place of Residence as Determinants of Academic Performance of Students' of Distance Learning Centre, University of Ibadan, Ibadan - *Ayeni, A. O. And Atanda, A. I.*.....30
4. Determining Psychometric Properties of Achievement Tests in ODL Business Management - *Esther O. Durowoju, Adams O. U. Onuka, (Ph. D.) & Adesoye T. Onabamiro,* .....38
5. Factors Affecting Learning in an Open and Distance Learning Programme - *Dontwi I. K., Amahia G N., Chukwu A. U., and Udomboso C. G.*.....60
6. Use of ICT for Administrative Tasks by Distance Learning Students Of University Of Ibadan, Nigeria - *Airen Adetimirin and L. Aigbefoh*.....77
7. Academic Accomodation of Students with Special Needs in Open/Distance Education. - *Adebomi. M. Oyewumi, Ph.D & Peter O. Olapegba, Ph.D*.....92
8. Facilitating Open and Distance Learning through Collaboration Measures - *Dr. S. C. Jhansi, Dr. Santosh Kumar Mishra,* .....103
9. Quality of Instructional Materials in Nigerian University Distance Learning Programmes - *Junaid, Ikmat Olanrewaju (Ph.D)*.....135
10. Personal and Environmental Stress Indicators Experienced by Pre-primary Teacher Trainees Undergoing Distance Learning Programmes - *M. N.Odinko* 166

# USE OF ICT FOR ADMINISTRATIVE TASKS BY DISTANCE LEARNING STUDENTS OF UNIVERSITY OF IBADAN, NIGERIA

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## **Abstract**

*A study of 175 Distance Learning students from the Faculty of Education, University of Ibadan to determine their ICT use for admission and registration was investigated. Data was collected using a questionnaire and interview. Findings revealed that ICT was used for the purchase and filling of admission forms while the registration process involved filling of bio-data and courses. Majority of the students used the cyber-cafe as access points for their admission (64.6 %) and 72.8% for registration process. Over 68.4% of the respondents used ICT for admission, while over 95% used it for their registration processing. The major constraints to ICT use for these tasks were: cumbersome procedure, unreliability of Internet service providers (ISPs), unstable power supply and high cost of accessing the Internet. Training should be given to the students to enhance their ICT skills and the internet connectivity should be more stable for easy access to perform the tasks.*

**Keywords:** *ICT use, Distance Learning Students, Nigeria*

**Word count:** 159

## **INTRODUCTION**

Distance learning (DL) is often described as the formalized learning received while the students are on a location outside the university campus. Both the teacher and student are expected to have minimal physical contacts, but place much reliance on electronic communications. Mabawonku (2004) explains it as open learning applied to situations in which there is a geographical separation between the learner and the learning institution. Distance learning is particularly beneficial to the students as they could



learn from their chosen locations, which could be thousands of miles away and can also be engaged in full time jobs at the time of study.

Akintayo and Bunza (2000) described distance learners as adults with professional responsibilities (jobs), social responsibilities (families), who usually study part-time and may have limited formal education or are a long time away from formal education. They are interested in practical results career, occupation or life style and are highly and intrinsically motivated.

The mode of communication depends heavily on ICT, which is used to communicate, create, disseminate, store, and manage information. These technologies include computers, the internet, CDs, audio and video cassettes broadcasting technologies (radio and television), and telephony (Mlitwa, 2004). ICT allows for accessibility, reliability, consistency and relevance of data, which are crucial to its use and effectiveness of information systems in a university setting (Marcella and Knox, 2004). ICT is used by students in their quest for continuing education for interpersonal and content interaction, as reported by Thorpe and Godwin (2006).

Much data on students, staff and finance abound in our universities. The organisation and processing of these large volumes of data, to generate valuable information for dissemination to all who might need it has become a very serious issue in our universities. ICT can be used to capture and manage these data, which would be useful to the distance learners and the institution for decision making. ICT provides access to a vast amount of information (Volman & van Eck, 2001), offers opportunities for improved education, enhances efficiency and provides new opportunities for learning (Cantoni et. al., 2004). It is reported that ICT is helping to solve many problems related to information access and use (Corbett and Williams, 2002).

The Distance learning students use ICT for processing admission, registration, receiving of lectures and communication with themselves and their lecturers. Other tasks involve checking their results online and accessing relevant information for their programmes. These students must have access to ICT and possess ICT skills in order to effectively benefit from accessing relevant information for their academic pursuits.

ICT performs greater roles in distance learning system, either during admission, registration or processing of results. For the admission process,

the prospective students are able to purchase and fill the admission forms online, while the staff use ICT in determining the number of students who have purchased the form, know those qualified for admission and who would be given admission eventually. The students register for courses in their various programmes and receive information through this medium, while the staff use ICT in collating the result of each of the students and disseminate information to them.

In most Nigerian distance learning centres, the problem of accessing funds to procure ICT facilities by the universities' authorities is one big problem that has militated against efforts at making their institutions ICT-driven. Most of the ICT centres managed by these Nigerian universities are either done through the collaborative efforts with the government and corporate bodies or the private sector. Even where these ICT facilities are on ground, some of the students do not have the necessary ICT skills to use them and therefore may not have access to relevant information needed to satisfy their information needs. Other problems include: lack of institutional policies to guide the provision of information to the students, poor facilities or equipment, high cost of internet access, poor telecommunications infrastructure and inadequate power supply (Adeloye, 2000; Adetimirin, 2009).

### **Statement of the Problem**

The objective of distance education in Nigeria is to reach out to a large audience who do not have access to formal education. Throughout the world, especially in the industrialised countries, a distance education programme is being run through the use of ICT. With ICT, people are able to apply, register for online courses, download course materials and tutorials, submit assignments through the internet, check results and communicate with one another or the institution.

However, it is surprising to note that most distance education programmes in Nigeria are still predominantly based on face-to-face interaction. The application of ICT facilities for admission processing and the entire registration is still largely impaired by a number of factors such as: irregular power supply, poor/low internet connectivity, inadequate ICT facilities and ICT literacy skills of the students. This study therefore aimed at investigating the use of ICT for administrative tasks by distance learning students of University of Ibadan.



### **Objective of the Study**

The main objective of the study was to investigate the use of ICT for administrative tasks by Distance learning students of University of Ibadan, Nigeria. The specific objectives were to:

- (1) Examine the need for the introduction of ICT for administrative tasks;
- (2) Find out the access points to the Internet for these tasks by the distance learning students;
- (3) Investigate the admission process that ICT is being used for;
- (4) Investigate the areas of the registration process that ICT is being used for;
- (5) Identify the problems encountered by the distance learning students in ICT use for these administrative tasks.

### **Research Questions**

The following are the research questions for this study:

- (1) Why was ICT introduced by the Distance Learning Centre for administrative tasks?
- (2) What is the access point to the Internet for these tasks by the distance learning students?
- (3) What aspect of the admission process is ICT being used for by the Distance learning students?
- (4) What aspect of the registration process is ICT being used for by Distance learning students?
- (5) What are the problems encountered by Distance learning Students in the use of ICT for administrative tasks?

### **Significance of the Study**

The study examined the role of ICT for administrative purposes and the findings of this study would be of relevance to the Distance Learning Centre by providing information to the management on the areas of weaknesses and strengths in the use of ICT by both the staff and students. This information will assist them in making decisions that would improve the system and make the programme accessible to more students and prospective students.

### **Scope of Study**

The scope of the study was limited to the use of the Internet for administrative tasks such as admission and registration processing by the distance learning students and staff of the University of Ibadan.

## Methodology

Survey design was used for this study and the population was made up of Distance learning students in the Faculty of Education, University of Ibadan, Nigeria. The Faculty has seven departments involved in the Distance Learning programme, which include: Library, Archival and Information Studies (LARIS), Adult Education (ADE), Educational Management (EME) and Guidance and Counselling (G & C). Others include: Teacher Education (TEE), Special Education (SPE), Human Kinetics and Health Education (KHE). The population was 1750 and the stratified sampling technique was employed for selecting the population for this study, with a sampling fraction of 10% to give a sample size of 175 (Table 1). The questionnaire and interview were the data collection instruments used and data was analysed using simple descriptive statistics such as frequencies and percentages.

## Results

### Questionnaire Distribution and Return Rate

A total of 175 copies of a questionnaire were administered to the students and 157 returned copies were used for analysis, giving a response rate of 89.7% (Table 2). The highest number of respondents was from G & C (29) while the lowest was from KHE (18). The distribution of respondent across levels of study based on departments showed that the highest number of respondents were in 300 level from TEE (14), while the lowest number of respondents were in 300 level, from SPE (1).

Department	Level	Number of Respondents
G & C	100	10
	200	10
	300	9
	400	10
	500	10
	600	10
	700	10
TEE	100	10
	200	10
	300	14
	400	10
	500	10
	600	10
	700	10
SPE	100	10
	200	10
	300	1
	400	10
	500	10
	600	10
	700	10
KHE	100	10
	200	10
	300	10
	400	10
	500	10
	600	10
	700	10
EME	100	10
	200	10
	300	10
	400	10
	500	10
	600	10
	700	10
ADE	100	10
	200	10
	300	10
	400	10
	500	10
	600	10
	700	10
LARIS	100	10
	200	10
	300	10
	400	10
	500	10
	600	10
	700	10

**Table 1: Study Population and Sample Size**

Departments	Study population Level					Sample size Level				
	200	200	300	400	Total	100	200	300	400	Total
LARIS	35	62	62	60	219	3.5	6.2	6.2	6.0	26
ADE	64	67	63	66	260	6.4	6.7	6.3	6.6	26
EME	55	49	49	52	205	5.5	4.9	4.9	5.2	21
G&C	62	177	47	22	308	6.2	17.7	4.7	2.2	31
TEE	71	67	7	71	216	7.1	6.7	0.7	7.1	28
KHE	52	50	45	46	193	5.2	5.0	4.5	4.6	19
SPE	45	55	78	58	236	4.5	5.5	7.8	5.8	24
<b>Total</b>	<b>1,750</b>					<b>175</b>				

**Table 2: Response Rate of the Questionnaire**

Department	Level of study								
	200		300		400		500		Total N
	N	%	N	%	N	%	N	%	
LARIS	2	10.0	7	35.0	6	30.0	5	25.0	20
ADE	9	40.9	2	9.1	4	18.2	7	31.8	22
EME	5	26.3	5	26.3	6	31.6	3	15.8	19
G&C	5	17.2	5	17.2	13	44.8	6	20.7	29
TEE	6	23.1	14	53.8	-	-	6	23.1	26
KHE	2	11.1	5	27.8	2	11.1	9	50.0	18
SPE	1	4.3	3	13.0	8	34.8	11	47.8	23



### Demographic Information of Respondents

ADE and TEE has the largest number of respondents in the age range of 25-30 years with 11 respondents each, while the least number of respondents which was one, was found in the age range of 35-40 in LARIS, EME, KHE and 40-44 in LARIS and TEE (Table 3). However, the highest number of respondents (55) were found in the 25-30 age range and this implied that majority of the students were within this age range. Majority of the respondents (82) were married, with the highest number in G&C (18), while the least number was seven and were in ADE. ADE has the highest number of respondents that were single (15), while the least, which was seven, were found in KHE and SPE (Table 3). Respondents that practised Christianity as a religion were 114 across all the departments, representing 72.6%. Respondents possessing diploma certificate were the highest across the departments (79, 50.3%), although TEE had the highest number (18).

**Table 3 Demographic Characteristics of The Respondents**

Variable		LARIS		ADE		EME		G&C		TEE		KHE		SPE		TOTAL N
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Level	200	2	6.7	9	30.0	5	16.7	5	16.7	6	20.0	2	6.7	1	3.3	30
	300	7	17.1	2	4.9	5	12.2	5	12.2	14	34.1	5	12.2	3	7.3	41
	400	6	18.7	4	12.5	6	18.7	6	18.7	-	-	2	6.2	8	25.0	44
	500	5	11.4	7	15.9	3	6.8	3	6.8	6	13.6	9	20.4	11	25.0	
Age (years)	Below 25	6	20.7	6	20.7	4	13.8	4	13.8	3	10.3	3	10.3	3	10.3	29
	25-30	9	16.4	11	20.0	8	14.5	9	16.4	11	20.0	2	3.6	5	9.1	55
	30-35	3	7.5	5	12.5	3	7.5	9	22.5	5	12.5	10	25.0	5	12.5	40
	35-40	1	10.0	-	-	1	10.0	-	-	4	40.0	1	10.0	3	30.0	10
	40-44	1	6.2	-	-	3	18.8	7	43.8	1	6.2	-	-	4	25.0	16
	Above 44															5

## **Research Questions**

### **Research Question 1: Why was ICT introduced by Distance Learning Centre for administrative tasks?**

Interviews were conducted with the heads of admission and records who revealed that the main reasons for the introduction of ICT for the administrative tasks were: easy access to prospective students for admission, quick access to registration details and compilation of student's records. Both the registration officer and the admission Officer attested to these facts.

### **Research Question 2: What is the access point to the Internet for these tasks by the distance learning students?**

The cybercafé, office and home were the access points used by these students for the administrative tasks. However, in all the departments, the cybercafé was used the most for both administrative tasks in all the departments, with a range of 47.4% - 82.8% except EME, where the home was the main access point, with 52.6% (Table 3). Respondents in G&C were the highest (10) that used the cybercafé for both tasks, having 82.8%, and the least number of respondents in EME, with 47.4%. LARIS had the highest number of students using the office as access point for these administrative tasks (40%) among the seven departments (Table 3).

**Table 3: Access Points to the Internet for Administrative Tasks**

Department	Cybercafe				Office				Home				Total
	Admission		Registration		Admission		Registration		Admission		Registration		
	N	%	N	%	N	%	N	%	N	%	N	%	
LARIS	8	40.0	4	20.0	2	10.0	6	30.0	-	-	-	-	20
ADE	7	31.8	9	40.9	3	13.6	2	9.1	1	4.5	-	-	22
EME	3	15.8	6	31.6	-	-	-	-	4	21.0	6	31.6	19
G & C	10	34.5	14	48.3	-	-	-	-	2	6.9	3	10.3	29
TEE	6	23.1	10	38.5	4	15.4	2	7.7	2	7.7	2	7.7	26
KHE	7	38.9	7	38.9	2	11.1	2	11.1	-	-	2	11.1	18
SPE	5	21.7	9	39.1	-	-	-	-	6	26.1	3	13.0	23

Research Question 3: What aspect of the admission process is ICT being used for by distance learning students?

With the introduction of ICT in the Distance Learning Centre, it was found out that majority of the students (over 68.4%) had used it for various admission activities such as admission requirements such as purchase of forms for admission (Table 4). The highest number of respondents that used ICT for admission requirements and purchase of forms were found in G & C department (9 and 12) respectively, while TEE had the highest number of respondents (13) using ICT for admission (Table 4).



Table 4: ICT use for Admission by Distance Learning Students

Department	Admission process for which ICT is being used										Total
	Admission Requirement		Purchase of form		For admission		Others		No response		
	N	%	N	%	N	%	N	%	N	%	
LARIS	7	35.0	6	30.0	6	30.0	1	5.0	-	-	20
ADE	7	31.8	10	45.5	5	22.7	-	-	-	-	22
EME	6	31.6	5	26.3	11	5.3	1	5.3	6	31.6	19
G & C	9	31.0	12	41.4	8	27.6	-	-	-	-	29
TEE	8	30.8	5	19.2	13	50.0	1	5.6	-	-	26
KHE	2	11.1	4	22.2	11	61.1	-	-	2	8.7	18
SPE	3	13.0	4	17.4	14	60.9	-	-	-	-	23

Research Question 4: What Aspect of the Registration Process is ICT being used for by Distance Learning Students?

Over 95% of the distance learning students used ICT for the registration activities which included: payment of school fees, registration for courses to be offered and checking of results (Table 5). This could be attributed to its adoption by the students who found it easy to use and could use it in their various locations without coming physically to the centre. Respondents from EME (10 or 52.6%) used ICT the most for payment of school fees, while the highest number of respondents from G & C (14) and SPE (14) used it for course registration. This implied that ICT was used for course registration, payment of school fees and checking of results by the distance learning students.

Table 5. Use of ICT for Registration by Distance Learning students

Department	Course registration		Payment of school fees		Checking of results		Others		Total N
	N	%	N	%	N	%	N	%	
LARIS	8	40.0	9	45.0	2	10.0	1	5.0	20
ADE	10	45.5	8	36.4	4	18.2	-	-	22
EME	5	26.3	10	52.6	3	15.8	1	5.3	19
G & C	14	48.3	8	27.6	7	24.1	-	-	29
TEE	13	50.0	7	27.9	6	23.1	-	-	26
KHE	5	27.8	4	22.2	9	50.0	-	-	18
SPE	14	60.9	7	30.4	1	4.3	1	4.3	23

### Research Question 5: What are the Problems Encountered by Distance Learning

#### Students in the use of ICT for Administrative Tasks?

Eight problems that these students could encounter in their use of ICT were listed in the questionnaire and they included: lack of ICT skills, cumbersome procedure, limited access to the Internet and unreliability of Internet service providers (ISPs). Others were inadequate ICT, brevity of time required to complete the tasks, unstable power supply and high cost of accessing the Internet (Table 6). Respondents were required to select one out of the five options given (Strongly Agree = SA, Agree = A, Not Sure = NS, Disagree = D and Strongly Disagree = SD). These five options were merged to produce three options (Agree, Not Sure and Disagree) for ease of analysis.

*Among the problems encountered by the respondents, four were found to be major problems, given that more than 50% of the respondents identified them as problems. They included cumbersome procedure, unreliability of Internet service providers (ISPs), unstable power supply and high cost of accessing the Internet (Table 6). The use of ICT was identified as*

cumbersome in all the departments, ranking between 50%-90%, while unreliability of ISPs had a range of 86.4% -100%. Unstable power supply was between 63.7%-100%, while high cost of accessing the Internet had a range of 59.1%-90% (Table 6). These problems encountered by these respondents affected their use of ICT for the administrative tasks even though they found it beneficial to use.

**Table 6 Problems Affecting ICT use for Administrative Tasks**

Problems	LARIS		ADE		EME		G&C		TEE		KHE		SPE	
	Agree	Disagree	Agree	Disagree	Agree	Disagree	Agree	Disagree	Agree	Disagree	Agree	Disagree	Agree	Disagree
	N %	N %	N %	N %	N %	N %	N %	N %	N %	N %	N %	N %	N %	N %
Lack of ICT skills	20 100.0	- -	5 40.9	13 59.1	17 89.5	2 10.5	22 75.9	7 24.1	16 61.5	10 38.4	14 77.8	4 22.2	15 65.2	8 34.8
Cumbersome procedure	18 90.0	2 10.0	16 72.3	6 27.3	14 73.7	5 26.3	20 68.9	9 31.1	13 50.0	13 50.0	16 88.9	2 11.1	17 78.9	6 26.0
Limited access to internet services	18 90.0	2 10.0	8 36.4	14 63.6	15 78.9	4 21.1	20 68.9	9 31.1	16 61.5	10 38.4	15 83.3	3 16.7	14 58.9	9 39.1
Unreliability of ISPs	19 95.0	1 5.0	19 86.4	3 13.6	19 100.0	- -	27 93.1	2 6.9	23 88.5	3 11.5	17 94.4	1 5.6	22 95.7	1 4.3
Inadequate ICT	19 95.0	1 5.0	12 54.6	10 45.5	13 45.5	6 31.6	17 58.6	12 41.4	11 42.3	15 57.6	14 77.8	4 22.2	13 56.5	10 43.5

## Discussion

ICT was used by the distance learning students for different admission and registration activities. This is supported by Mlitwa (2004), who emphasised that the mode of communication in distance learning is largely dependent on ICT. Among ICT, the Internet is credited with allowing access to a wide range of knowledge, especially as it has become central to scholarly communication through the creation of numerous e-journals and teaching resources (Koubek and Jandl, 2000; Thelwall, 2002). ICTs were found to be used by the respondents in cybercafés, offices and at home and this result was corroborated by Rajagopal and Bojin (2003) who reported that the Internet was used at home for academic purposes such as assignment, and on-line communications in China.

Four major factors considerably affected ICT use by the students. The factors were cumbersome procedure, unreliability of Internet service providers (ISPs), unstable power supply and high cost of accessing the Internet. The students reported ICT use as cumbersome, and this may be



attributed to their inadequate ICT skills, as an equipped individual would not find a process difficult or cumbersome in its use. The finding is supported by Ajuwon (2003) who reported insufficient computer and Internet use proficiency as factors affecting the use of computer and the Internet among first year clinical and nursing students in a Nigerian teaching hospital.

Unreliability of ISPs and unstable power supply were some of the major factors that affected their ICT use and this agreed with the findings of Igben and Akobo (2007) who listed stable power supply and good telecommunications, knowledgeable technical expertise as factors that affect the use of ICT. Barraket and Scott (2001), in their study on students' experiences of ICT use in the University of Technology, Sydney, Australia, highlighted ready access to infrastructure, availability of facilities, maintaining and upgrading equipment, as factors that affected the effective use of ICT, while Ibegwam (2004) observed that students of the College of Medicine, University of Lagos, Nigeria listed frequent computer breakdown and slow speed of downloading materials as factors affecting their use of the Internet, which was a result of unreliability of the ISPs.

The high cost of accessing the Internet could be attributed to the fact that majority of these students are married and have family responsibilities, which they must shoulder. The monthly income of an average civil servant who is a distance learner is N15,000 and this is poor, so they are financially incapable to do many things such as frequent use of ICT due to their poor finances. Internet access in Nigeria comes with a fee, even on university campuses. For example, the ICT unit of the University of Ibadan charges 45 cents (N60) per hour for Internet access. In general, the result of the present study and those of others showed that whether at school or at home, once Internet access comes with a fee, low income becomes a limiting factor to high ICT use. The above cost charged per hour for Internet access in the ICT unit of the University of Ibadan represented a 40% reduction in the cost in 2006. Free Internet access may therefore be possible in the near future on campuses of Nigerian universities, especially as the technology becomes cheaper and as more people use the facility.

Literature has shown that ICT use is dependent on income. In a study by Taylor *et al.* (2003), they identified family income as one of the two factors affecting the usage of the Internet at home in Central Queensland, Australia, the other being employment status. Hoffman and Novak (1999) in their review of the various studies on computer and Internet usage

patterns over time in the USA, ascertained that increasing levels of income correlated with increased likelihood of owning a computer at home, which would facilitate increased use of the Internet.

### Conclusion

ICT use by distance learning students cannot be compromised, as reflected in their use of ICT for administrative tasks such as admission and registration. Their use could be attributed to its introduction by the centre and their adoption of it due to its ease and benefits. However, their use of ICT is hindered by some problems, which could be solved through the provision of improved infrastructure and acquisition of relevant ICT skills.

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