

## AN ASSESSMENT OF INTERNET UTILISATION IN SELECTED AGRICULTURAL COLLEGES OF PLATEAU STATE, NIGERIA

Edore Akpokodje <sup>1</sup>, Vera Akpokodje <sup>2</sup>

<sup>1</sup>Computer Science Department, FCAH&PT, Vom, [eakpokodje@gmail.com](mailto:eakpokodje@gmail.com).

<sup>2</sup>University of Jos Library, University of Jos, [Veraforlive@yahoo.com](mailto:Veraforlive@yahoo.com)

### Abstract

The study investigated the patterns of Internet use among students of agriculture in some selected colleges of agriculture in Plateau State, Nigeria. A well-structured questionnaire was distributed among the 128 Higher National Diploma (HND) students of agriculture in colleges of agriculture in Plateau State. Questionnaires were given out to students using a simple random sampling technique. Simple frequency tables were used to analyse the data collected. A t-test and correlation were also performed on the data. The present study demonstrates and elaborates the various aspects of Internet use such as; most frequently used place for internet use, purpose for which the Internet is used, use of Internet services, problems faced by users and satisfaction level of users with Internet facility provided in the colleges. The study results revealed that 78.1% of the respondents *had used* the Internet for research, 45.3% *had accessed* the Internet at a cyber café, slow access speed *had been* the major problem faced by users (48.8%), students within the *age group* of 20 to 25 years *had spent* more time on the Internet than other age categories (43.8%), majority of the respondents utilized the World Wide Web service of the Internet (50.8%) and there is significant association (perfectly positive relationship) between Internet facility, awareness and Internet use. Some suggestions have been put forth to make the service more beneficial for the academic community of agricultural colleges under study.

**Key words: Internet Utilisation, Agriculture, Colleges of Agriculture**

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### Introduction

In the era of information technology the Internet, the worldwide network of networks has emerged as the most powerful tool for an instant access to information. Information is now just a finger touch distance away from users and it would not be inappropriate to say that the Internet has become the biggest digital information library which provides the easiest access to information for end users at any time and at any place in the world. The Internet has become the most extensively used information source that empowers the average person. Today's users can no longer depend on conventional information sources to cope with the latest developments in their respective fields. According to Leinir et al (1997), the Internet has revolutionized the computer and communications world like never before. The invention of the telegraph, telephone, radio and computer has set

the stage for this unprecedented integration of capabilities. The Internet is at once a world-broadcasting capability, a mechanism for information dissemination and a medium for collaboration and interaction between individuals and their computers without regard to geographic location. Technological evolution began with early research on packet switching and the Advanced Research Project Agency Network (ARPANET) grew into the Internet. Since then the Internet has had a drastic impact on culture and commerce. The Internet has emerged as a powerful education tool, with the increasing impact of information and communication technologies on higher education, all those concerned with higher education need to grasp how ICT could help in modernizing the process of teaching, learning and research.

Agriculture production is becoming ever more dependent on Information Technology (IT) (Gelb & Voet, 2009). The exposure presence of the Internet on the Information and Communications Technology (ICT) scene and the rapid adoption of Internet supported activities have created a wide range of opportunities and expectations in Agricultural production. Farmers have more information on how to manage their farms. Furthermore, farmers go into marketing their agricultural products through the Internet and they also have access to the market where they can purchase the recent equipment's and machines that can aid them in agricultural production. They also have access to information about new chemicals such as pesticides, insecticides and herbicides and how to obtain them cheaply thereby maximizing their profit. Effective adoption of the Internet for extension in agriculture is challenging despite substantial investment in human capital and other resources. A lot of benefits such as updated and comprehensive information reach the end users and farmers have access to new methods of agricultural practices. Today in agricultural tertiary institution (universities, colleges of agriculture and monotechnics) the Internet is playing a vital role in imparting technical knowledge in the area of agricultural teaching and research. Students of tertiary institutions require the latest information in the field of agriculture. In the developing countries like Nigeria, students suffer from inadequate access to information facilities, which will aid in their research, cross pollination of ideas and interaction with other relevant organizations and research centres in the field of agriculture.

#### **Statement of Problem**

Agricultural production is becoming dependent on Information Communications Technology (ICT) use for agricultural studies and agricultural extension. The relevance of the Internet in modern agriculture in terms of accessibility cost and how Internet services are used among students needs to be studied.

#### **Aim of the Study**

The study is aimed at determining the patterns of Internet use among students of colleges of Agriculture.

#### **Objective of the Study**

1. To determine the location of access to the Internet among students of Colleges of Agriculture.
2. To identify the purposes of Internet utilization among students of Colleges of Agriculture.
3. To determine the level of spending on Internet Access among students of Colleges of Agriculture.
4. To determine the Internet services used by students of Colleges of Agriculture.
5. To determine the challenges to Internet access and utilization among students of Colleges of Agriculture.

#### **Significance of the study**

The ever increasing number of people accessing the Internet coupled with recent explosion of information resources on the Internet may have considerable implications on teaching, learning and research. This study is therefore an attempt to assess the effectiveness of the Internet as an educational tool and what role it actually plays in the educational system with special reference to agricultural colleges. The Internet is an inseparable part of today's agricultural education system, it is therefore important to find out to what extent it's services are utilized by students for agricultural education purposes and the challenges to access and utilization.

#### **Limitation of the study**

This research was not carried out in all Colleges of Agriculture in the Plateau State due to constraints of time and money.

#### **Area of study**

This study was carried out in some selected monotechnics and colleges of agriculture in the Plateau state of Nigeria that were duly approved by the National Board of Technical Education (NBTE). They are:

1. Federal College of Animal Health and Production Technology (FCAH&PT), Vom
2. Federal College of Forestry (FCF), Jos
3. Federal College of Land Resources Technology (FCOLART), Kuru, Jos.

#### **Methodology**

In an attempt to achieve the objective and the purpose of this research, the researchers have collected information from different sources. The researchers of this project gathered information from two (2) main sources. They are the primary and secondary source. Questionnaire method has been employed to collect the data for the present study for the students of Higher National Diploma(HND) 1 and Higher National Diploma(HND) 11 in three (3) Colleges of Agriculture in Plateau State. Sixteen respondents were selected randomly from each programme of the colleges, eight respondents each from HND I

and HND II. The respondents were divided equally into male and female where possible. Accordingly, 8 HND programmes were used and 128 questionnaires were administered from three (3) Colleges of Agriculture. The secondary source of data refers to information that is already processed by other researchers at various times and at different places. This information sources include the Internet, textbooks, Journals, Seminar papers, Magazines, Handbooks and New papers. Data from the sources of information of this research was analysed using Statistical Package for the Social Sciences (SPSS 17.0.1).

## Results

Table1: Demographic profile of the students and response to college Internet facilities.

Variable	value	count	percent
Respondents	FCAH&PT	48	37.5
	FECOLART	32	25
	FCF	48	37.5
Sex	Male	91	71.1
	Female	37	28.9
Programme	HND 1	62	48.4
	HND 11	66	51.6
Age	Less than 20 years	7	5.5
	20-25 years	36	43.8
	25-30 years	37	28.9
	30 and above	28	21.9
Connection	Yes	92	71.9
	No	36	28.1

Source: Field survey, (2010)

Table 1 shows that 37.5% of the respondents were from the Federal College of Animal Health and Production Technology and 25.5% from the Federal

College of Forestry and the Federal College of Land Resource respectively.

The result also shows that 71.1% of the respondents were male and 28.9% of the

respondents are female. The survey of the results also show that 5.5% were less than 20 years and 43.8% were between 20-25

years and 71.9% of the respondents said their college was connected to the Internet.

Table 2: Location of access to Internet among students in colleges of Agriculture in Plateau State

Variable	Value	Frequency	Percent
Place	At college	54	42.2
	At home	10	7.8
	Cyber cafe	58	45.3
	Other places	6	4.7

Source: Field survey, (2010)

Table 2 shows that most students (45.3%) accessed the Internet in cyber cafes, followed closely by their college's computer centre (42.2%). The home had the lowest access level of 7.8% of the respondents.

Table 3: Purpose of Internet use among students of Colleges of Agriculture in Plateau State

Variable	Value	Frequency	Percent
Purpose	Research	100	78.1
	Entertainment	1	0.8
	Communication	2	1.6
	News	2	1.6
	General information	23	18

Source: Field survey, (2010)

Table 3 shows that most students (78.1%) used the Internet for the purpose of research. This is followed by general information (18%), then by communication and news with 1.6% respectively. The least purpose for the use of the Internet by the students was for entertainment (0.8%).

Table 4: Level of spending on Internet Access among students of Colleges of Agriculture

Variable	Value	Frequency	Percent
Cost	₦2000 and above	19	14.8
	₦1000 and ₦2000	20	15.6
	₦500 and ₦1000	27	21.1
	₦500 to below	49	38.3
	Nothing	13	10.2

Source: Field survey, (2010)

Table 4 shows that most students spent ₦500 and below to access the Internet (38.3%). Followed by those who spent between ₦500 and ₦1000(21.1%), then by those who spent between ₦1000 and ₦2000 (15.6%), then by those who spent ₦2000 and above (14.8%). Those who spent nothing on Internet access are the fewest (10.2%).

Table 5: Internet services used by students of Colleges of Agriculture in Plateau.

Variable	Value	Frequency	Percent
Service	Email	39	30.5
	Face book	14	13.3
	World Wide Web	65	50.8
	Others	7	5.5

Source: Field survey, (2010)

Table 5 shows that most students used the World Wide Web (50.8%), followed by the E-mail service (30.5%), then Face book (13.3%). 7.7% of the students used other service.

Table 6: Challenges to Internet access and utilization among students of Colleges of Agriculture.

Problem	Frequency	Percent
Problem slow access speed	74	57.3
Difficulty in finding relevant information	22	17.1
Overload of information on the Internet	5	3.9
Privacy problem	5	3.9
Cost of access to the Internet	18	14.1
Others	4	3.1

Source: Field survey, (2010)

Table 6 shows that most students (57.3%) considered slow access speed as the major problem in using the Internet. This was followed by difficulty in finding relevant information (17.1%) then by cost of access (14.1%). Also, 3.9% of the respondents considered lack of privacy when accessing the Internet and overload of information on the Internet respectively. Lastly, 3.1% of respondents implicated other problems.

Table 7 : One sample t-test of difference between respondents in terms of access to Internet facilities.

Variable	Mean	std	std error m	t	df	sig.	md
Computer	1.02	.152	.013	76.236	127	.000	1.023
Connection	1.28	.451	.040	32.114	127	.000	1.281

Source: Field survey (2010)

The table shows that there is a no significant difference between respondents in terms of access to Internet facilities.

Table 8: Correlation of Internet use on sex, education, age and Internet facilities.

Variable	Value	Decision
Sex	-0.149	Negative relationship
Education	-0.47	Negative relationship
Age	-.074	Negative relationship
Internet facilities	1.000	perfectly positive relationship

The table shows that there is a Negative relationship of -0.149 for sex, -0.47 for education, and -0.74 for age this shows that sex, age and educational level do not determine students Internet usage, while there is positive relationship between Internet facilities and Internet use, which means that availability of Internet facilities determine the rate of Internet use by the students.

### Discussion

The results support the existing research that reveals a significant association among students to Internet utilization. The result shows that 71.1% of the respondents are male and 28.9% of the respondents are female. A high percentage of 71.1% of the respondents said their college is connected to the Internet. There is a negative relationship of -0.149 for sex, -0.47 for education, and -0.74 for age. This shows that sex, age, educational level are not determinants of Internet usage i.e. your age, sex and educational qualification do not determine how, where and for our long you use the Internet. These findings agree with the work carried out by Banmeke (2007), which said that there is no significant association

between the age, gender, level of study and use of Internet.

This research agrees with the work carried out by Banmeke (2007) which shows that 59.6% of the respondents were within the ages of 21 to 25 years majority of whom access the Internet. The result shows that most people (45.3%) access the Internet from cyber cafes.

There have been rapid advances in Internet use by students of agriculture. The students mostly use the Internet for research; this is comparable to previous studies. Kumar & Kaur (2005) study revealed that most students use the Internet for education. Most students spend money in other to have access to the Internet (89.8%). This is not comparable to Kumar & Kaur (2005) study which showed that most of the students access the Internet at their colleges free of charge.

Furthermore, the World Wide Web is the most popular of the Internet services used by the students; this is because most of the students use the Internet for research (project). This is not

comparable to previous studies where email use was high (76.4%) in University College Hospital Ibadan, in selected departments of the Faculty of Agriculture, University of Benin city, Nigeria and Engineering Colleges of Punjab, India.

Despite the usefulness of the Internet to students of agriculture in the colleges under study, there are constraints to the use of the Internet. This study revealed that most of the students (57.3%) implicated slow access speed as the most serious problem to Internet utilization. This result agrees with Kumar & Kaur (2005) study which revealed that the most common problem faced by majority of the respondents is the delay in retrieving relevant information while surfing the Internet.

### Summary

Data was collected from 128 students of HND programmes in some colleges of agriculture in Plateau State. There is a significant association (perfectly positive relationship) between Internet facility, awareness and Internet use. Research (78.1%) is the main purpose for Internet utilization.

The result also shows that most respondents accessed the Internet at a Cyber cafe (45.3%) followed by their colleges Internet facility (42.2%), at home (7.8%), and other places (4.7%). The service mostly utilized is World Wide Web (50.8%) followed by Email (30.5%), Facebook (13.3%) and others services (5.5%). The major problem faced by users is slow access speed (57.3%), difficulty in finding relevant information (17.1%), cost of access to the Internet (14.4%), overload of information on the Internet (3.9%), privacy problem (3.9%), and others (3.1%).

The Internet facility has enabled the students to enhance their academic excellence and provide the latest information and access to worldwide information. Students in the colleges of Agriculture in Plateau State, Nigeria have not fully utilized these new technologies.

### Conclusion

Internet facilities have enabled the students to enhance their academic excellence by providing them the latest information and access to worldwide information. The present study has highlighted the existing situation of the Internet

facilities and its utilization in the Colleges of Agriculture in Plateau State. The situation is not, however satisfactory from the respondents point of view. The information on the Internet is not usually available in an organized way and the users are unable to pin point information from the Internet. Although the Internet is an important source of agricultural information, the students in the Colleges of Agriculture in Plateau State, Nigeria have not fully utilized these facilities.

### Recommendation

Based on the findings in the study, the following recommendations which will help improve the use of the Internet among the academic community and for future research were proffered:

- More Internet facilities should be provided for students.
- Internet facilities should be separately provided for lectures.
- Research should be carried on the comparative study on patterns of Internet use among the Colleges, different types of user's behaviour, comparison of user's behaviour and attitude toward the Internet and patterns of Internet use among teenagers and secondary school students.

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