The Role of the Internet in the Academic Pursuit of University Students: A Study of Ahmadu Bello University, Zaria and Bayero University, Kano, Nigeria.

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Abstract. In this work, the researchers sought to seek the current and potential impact of the Internet on students of Nigeria tertiary educational system, through the role of the Internet in the academic pursuit of university students using Ahmadu Bello University Zaria and Bayero University Kano as study. The aim of the study therefore is to establish the correlation between Internet usage and student academic performance. A well-structured questionnaire was randomly distributed to one thousand (1000) students of both ABU Zaria (700) and BUK (300) with a response rate of 583 and 280 for ABU and BUK respectively. In concluding our findings, several variables were put into consideration such as, the rate at which students use the Internet and whether the Internet can assist students to acquire knowledge, and the role of Internet access in the academic pursuit of students. The study was able to establish that the youths, especially students, use the Net in ways that enhance their academics.

Keywords: Internet, Youth, Academics, Communication Technologies

1. Introduction

Communication technologies have become a prominent feature of the twenty first century. They are critical to commerce, essential to entertainment, and intertwined in our interpersonal relationships (Grant, 2008, p. 1). Succinctly put, communication technology is the nervous system of contemporary society, transmitting and distributing sensory and control information and interconnecting a myriad of interdependent units. These technologies are vital; they have the potential for profound impact on virtually every area of human society. There is virtually nothing one does at present with no direct link to communication technology. It has taken communication, friendship, education and other vital aspects of human socialisation to a new level in which communication gadgets have become man's most priced companion. Smart phones, computers, IPads, IPods, are examples of communication gadgets that characterise today's communication media.

One of the greatest manifestations of this modern communication technology/New Media is the Internet (Salawu, 2007, p. 20). The Internet, the network of networks (Baran, 2000, p . 68), is noted for its capacity to connect so many computers and users together through a complex network whereby information can be

accessed with total disregard for time and space, thus enabling interaction on a far more broadened scope. Communication becomes an interactional process facilitated by the connectivity which the Internet provides through various interposed devices. The interconnectedness occasioned by the convergence of communication technology and given impetus by the Internet, has resulted in a new world communication order in which individuals are bound to each other by communication linkages via new media channels manifesting through smart phones, social network sites, chat applications and personal computers. The implication of this is that individuals are now far more glued than ever before to Internet-enabled devices that allow for quick and easy communication linkages with friends, families and colleagues. Interaction therefore is 'on the go,' whether sitting, walking, talking or on transit in a vehicle.

The situation is further heightened by the introduction of Internet technology in higher institutions within Nigeria. Institutions such as the Ahmadu Bello University (ABU) Zaria and the Bayero University Kano (BUK), amongst others, have a potent Internet infrastructure that gives students' access to the Net with a view to enhancing their academic endeavours. The provision of this is expected to enable students gain access to materials and resources online to strengthen their capacity for research. As such, one of the characteristics of these institutions is that you find students who are at ease with online collaborative technologies (digital natives), students who come to class armed with smart phones, laptops, iPods and technologies which allow them become much more engaged in constructing their own knowledge about the society within which they exist. Being always connected is something natural to them, and they have conversations constantly going with their social networks via text messaging and instant messaging. Interacting with technology and through technology has become part of daily living.

Hence, there is a general assumption that the Internet is a form of distraction and bad influence on youths. In an article on the Daily Trust Newspaper, Itodo (2011) posits that there seems to be an alarming rate of social networking obsession among youths today; a trend that could affect their academic, social and spiritual lives negatively if not properly controlled. Many concerned parents have expressed grave concern that they could hardly get the attention of their children and wards, as they seem to have been carried away by the fascinating world of social networks. Some youths are such social freaks that they have now carved out for themselves a world of fantasy and illusion far detached from reality. Bello (2012) of the Sunday Observer, argues that the dangerous trend of social network "obsession" if left unchecked could further affect an already collapsing education system in Nigeria.

With the increasing growth in the usage of the Internet manifesting through various technologies in Nigeria, it is necessary that we carry out a study to understand the nature and characteristics of this growing phenomenon amongst the Nigerian youths. Similarly, Liman (2014) and Bawa (2014) have also researched into the nature of Internet usage in Nigeria and its contributions to education and democracy respectively using Ahmadu Bello University as a case study. This study departs significantly from earlier studies in this area because it attempts to interrogate the Nigerian Internet users in order to understand its implication the education of youths using two Nigerian universities namely Ahmadu Bello University (ABU), Zaria and Bayero University Kano (BUK). It is important to note that the study did not concern itself with carrying out a comparative study of both universities, due to the fact that they already have similar characteristics in terms of internet infrastructure. Therefore, these two universities were chosen because of their particular mandate to become leading institutions in Africa and the world at large. Their location and drive towards provision of a strong Internet infrastructure also informs their choices.

The aim of this study therefore is to establish the correlation between Internet usage and student academic performance. The study has the following objectives: (1) To determine the rate at which students use the Internet. (2) To

determine whether the Internet can assist students to acquire knowledge to become well-informed citizens. (3) To ascertain the role of Internet access in the academic pursuit of students and its implication for effective expression of citizenship.

2. Methodology

The survey research method was deployed for this research using questionnaire as the major tool for data collection. One thousand (1000) copies of the questionnaire were administered to students of both ABU Zaria and BUK. To arrive at this number, the study used the already existing stratification of departments and Faculties. Hence, to determine the faculties to be studied in both ABU and BUK the study made use of the Systemic Sampling Method and to determine the departments to be studied, the study employed the Random Sampling Method.

According to Mugo (2002), the sample procedure for systematic sampling involves the following:
- Number the units in population from 1 to N
- Decide on the n (sample size) that is required
- Select an interval size $k = N/n$
- Randomly select an integer between 1 to k
- Finally, take every kth unit

As such, the faculties within both universities are numbered one to twelve. The interval size, k, is equal to $N/n = 12/4 = 3$. Three, therefore, is selected as the random integer from 1-3 and the sample faculties were gotten by picking every nth number beginning from the third on the list.

Table 1. Sampled faculties from Bayero University, Kano

S/no	Faculties	Student Population	Selected Sample
1	Agriculture	785	
2	Allied Health Science	403	
3	Arts and Islamic Studies	2,945	Arts and Islamic Studies
4	Biochemical Sciences	622	
5	Clinical Sciences	1240	
6	Computer Sciences & Information Technology	756	Computer Science & Information Technology
7	Dentistry	172	
8	Education	5290	
9	Engineering	1520	Engineering
10	Law	1048	
11	Sciences	3453	
12	Social and Management Sciences	5799	Social and Management Sciences

Table 2. Sampled faculties from Ahmadu Bello University, Zaria

S/no	Faculties	Student population	Selected sample
1	Administration	3678	Administration
2	Agriculture	518	
3	Arts	2845	
4	Education	4871	Education
5	Engineering	4235	
6	Environmental design	2526	
7	Law	1481	Law
8	Medicine	2031	
9	Pharmaceutical Sciences	873	
10	Sciences	7122	Sciences
11	Social sciences	3403	
12	Veterinary Medicine	544	

The four faculties identified from both universities have a total of 41 departments respectively (20 from BUK and 21 from ABU). To ascertain the number of departments to be sampled, the study used the percentage of four (4) faculties out of 12, which is 33%. Thirty three percent (33%) of 20 and 21 respectively approximately amounts to seven (7).

In determining the departments to be studied from each faculty already identified, the study made use of the random sampling method. The procedure of selection of random samples includes; drawing by lot numbered slips of paper from a container, using tables of random numbers, and using roulette wheel (Jewale, 2012). The study adopted the drawing by lot approach to determine the seven (7) departments to be sampled from the various faculties chosen. Using the drawing by lot technique, the names of the departments were written on pieces of paper and shuffled in a container from which the researcher picked. To further determine the sample size of each department, the study employed the use of a sample fraction. The sample fraction is decided by dividing the desired sample size by the entire population. As such the sampling fraction is n/N = 300/3, 289= 15% for BUK and 700/7, 748= 6.5% for ABU.

Table 3. BUK Sampled Departments and Selected Samples

S/no	Faculty	Departments	Random sample	Population	Selected Samples 9.12%
1	Arts & Islamic Studies	Arabic			
		English & French	English & French	414	38
		Theatre & Film Studies	Theatre & film Studies	44	4
2	Computer Science & Information Technology	Computer Science	Computer science	756	69
3	Engineering	Agricultural Engineering	Agricultural engineering	157	14
		Electrical Engineering	Electrical	646	59
4	Social & Management Science	Accounting			
		Economics	Economics	1024	93
		Geography	Geography	248	23
			TOTAL	**3, 289**	**300**

Table 4. ABU Sampled Departments and selected Samples

S/no	Faculty	Departments	Random Sample	Population	Selected Samples 9.3%
1	Administration				
		Business administration	Business administration	910	82
		Public Administration	Public Administration	1077	98
2	Education	Arts & Social Science	Arts & Social Science	1381	125
		Vocational & Technical Education	Vocational & Technical Education	578	52
3	Law	Civil Law	Civil Law	822	74
4	Sciences	Biochemistry			
		Biological Sciences	Biological sciences	1155	104
		Mathematics	Mathematics	1825	165
			Total	**7, 748**	**700**

3. Data Presentation and Analysis

This section presents the analysis of data gathered from respondents through questionnaire. The quantitative data gathered was interpreted and analysed in line with the objectives of the study and inferences as well as deductions were drawn from the results with regards to the subject of investigation. The inferences and deductions were drawn using the Likert scale with a mean criterion of 3.0 used to validate the agreement of respondents to questions. Copies of the questionnaire were distributed to students of both ABU and BUK (700 copies for ABU and 300 copies for BUK). A total number of 863 respondents filled and returned copies of the questionnaire from both universities; 583 out of 700 for ABU and 280 out of 300 for BUK making a total of 863. The data and analysis are presented in line with the objectives of the study below:

Rate at which students use the internet (see table 5 and 6 below)

Table 5: regular usage of the Internet

S/n	Variable	Characteristic	ABU Frequency (%)	BUK Frequency (%)
	I use Internet regularly	Strongly Agree	210 (36.0)	56 (20.0)
		Agree	308 (52.8)	168 (60.0)
		Disagree	22 (3.8)	14 (5.0)
		Strongly Disagree	9 (1.5)	14 (5.0)
		Don't Know	34 (5.8)	28 (10.0)
		Total	**583 (100.0)**	**280 (100.0)**

Source: Field Work 2015

Literatures widely suggest that youths constitute the largest number of Internet users. The study therefore found it necessary to ascertain the rate at which students make use of the Net. The table above shows that 510 (88.0%) of the respondents from ABU agree to using the Internet regularly, 31 (5.3%) disagree, and 34 (5.8%) remained neutral. For BUK, 224 (80.0%) of the respondents agree to using the Internet regularly, 28 (10.0%) disagree, while 28 (10.0%) have no opinion on the matter. Therefore, majority of the respondents from both universities use the internet regularly for different purposes. This thus agrees with suggestion of literatures that the youths are frequent users of the Internet.

Table 6: Rate at which University Students use the Internet

Variable	Characteristic	ABU Frequency (%)	BUK Frequency (%)
Hours spent chatting online	1 hr-2hrs	367 (63.0)	210 (75.0)
	3 hr-4hrs	114 (19.6)	14 (5.0)
	5 hr-6hrs	36 (6.2)	14 (5.0)
	All day	45 (7.7)	28 (10.0)
	No response	21 (3.6)	14 (5.0)
	Total	**583 (99.9)**	**280 (100.0)**
Hours spent on social network(s)	1 hr-2hrs	377 (64.7)	168 (60.0)
	3 hr-4hrs	93 (16.0)	70 (25.0)
	5 hr-6hrs	35 (6.0)	0 (0.0)
	All day	45 (7.7)	0 (0.0)
	No response	33 (3.6)	42 (15.0)
	Total	**583 (99.9)**	**280 (100.0)**
Hours spent sending, receiving or reading emails	1 hr-2hrs	422 (72.4)	196 (70.0)
	3 hr-4hrs	50 (8.6)	0 (0.0)
	5 hr-6hrs	9 (1.5)	0 (0.0)
	All day	22 (3.8)	14 (5.0)
	No response	80 (13.7)	70 (25.0)
	Total	**583 (99.9)**	**280 (100.0)**
Hours spent on finding educational materials / research	1 hr-2hrs	207 (35.5)	140 (50.0)
	3 hr-4hrs	222 (38.1)	56 (20.0)
	5 hr-6hrs	63 (10.8)	0 (0.0)
	All day	52 (8.9)	42 (15.0)
	No response	39 (6.7)	42 (15.0)
	Total	**583 (99.9)**	**280 (100.0)**

Source: Researcher's Field Survey, 2015

The data in table 6 above shows the rate and pattern of usage of the Internet by students. For ABU, 367 (63.0%) spend 1-2 hours daily chatting, 114 (19.6) spend 3-4 hours chatting, 36 (6.7%) spend 5-6 hours and 45 (7.7%) spend all day chatting. On social network, 377 (64.7) spend 1-2 hours, 93 (16.0%) spend 3-4 hours, 35 (6.0%) spend 5-6 hours while 45 (7.7%) spend all day on social network. On emails, 422 (72.4%) spend 1-2 hours, 50 (8.6%) spend 3-4 hours, 9 (1.5%) spend 5- 6 hours, and 22 (3.8%) spend all day on emails. On sourcing for educational materials, 207 (38.1%) spend 1-2 hours, 63 (10.8) spend 3-4 hours, 52 (8.9%) spend all day. However for BUK, 210 (75.0%) spend 1-2 hours chatting online, 14 (5.0%) spend 3-4 hours daily, 14 (5.0%) spend 5-6 hours daily, 28 (10.0%) spend all day.

On social network, 168 (60%) spend 1-2 hours daily, 70 (25%) spend 3-4 hours daily and 42 (15.0%) did not provide any response. On emails, 196 (70%) spend 1-2 hours daily, 14 (5.0%) spend all day and 70 (25.0%) did not provide any response. On sourcing for educational materials, 140 (50.0%) spend 1-2 hours daily, 56 (20.0%) spend 3-4 hours daily, 42 (15.0%) spend all day and 42 (15.0%) did not provide any response. This therefore implies that majority of the respondents from both ABU and BUK spend 1-2 hours daily on chatting, social network and e-mails. While majority of the respondents spend more time 3-4 hours daily sourcing for educational materials on the Net. The characteristic interactivity which is enabled by chat applications, allows students (users) to speedily receive and respond to messages in real time. This keeps them glued to their phones always and even sometimes serves as distraction to them during lectures.

Table 7: The Internet can assist students to acquire knowledge to become well informed citizens.

Characteristic	ABU			BUK		
	Frequency (%)	Mean		Frequency (%)	Mean	
Strongly Agree	326 (55.9)	4.2		182 (65.0)	4.5	
Agree	221 (37.9)			84 (30.0)		
Disagree	8 (1.4)			0 (0.0)		
Strongly Disagree	16 (2.7)			0 (0.0)		
Don't Know	12 (2.1)			14 (5.0)		
Total	**583 (100.0)**			**280 (100.0)**		

Source: Researcher's Field Survey, 2015

The table above shows the distribution of respondents as to whether they get useful information from the internet which can assist them in their academics. As such, 574 (91%) of the respondents from ABU agree to have been acquiring useful information for their academics from the Net, while 24 (4.1%) of the respondents disagree and 12 (2.1) did not have an opinion on the matter. For BUK, 266 (95.0%) agree to have been acquiring useful information for their academic study, none of the respondents disagree, while 14 (5.0%) of the respondents did not have an opinion on the matter. The average mean of 4.2 and 4.5 respectively substantiates the agreement of the respondents. Thus, the majority of the respondents from both universities agree to acquire useful materials for their academics online. One can argue that the implication of this deduction is that most students are able to use the Net to source for useful materials to assist them in their studies.

Role of the Internet in the academic pursuit of students: (see table 8 and 9 below)

Table 8: My exposure to the Internet builds my capacity to handle academic matters competently

Characteristic	ABU			BUK		
	Frequency (%)	Mean		Frequency (%)	Mean	
Strongly Agree	194 (33.3)	4.0		42 (15.0)	3.8	
Agree	293 (50.3)			182 (65.0)		
Disagree	42 (7.2)			28 (10.0)		
Strongly Disagree	9 (1.5)			0 (0.0)		
Don't Know	45 (7.7)			28 (10.0)		
Total	**583 (100.0)**			**280 (100.0)**		

Source: Researcher's field survey, 2015

The table above shows that 487 (80.6%) of the respondents from ABU agree that the Internet builds their capacity to handle academic matters competently, 51 (8.7%) of the respondents disagree and 45 (7.7%) did not have an opinion on the matter. Data from BUK also reveal that 224 (80.0%) agree to the question, 28 (10.0%) disagree and 28 (10.0%) did not have an opinion on the matter. Deductively, majority of the students from both universities find the Internet as a medium that builds their capacity to handle academic

matters competently. This corroborates literature which suggests that the Internet enhances academic learning in higher institutions. The implication of this is that as students get knowledge they become well equipped as citizens to express themselves, fight for their rights, as well as carry out their obligations effectively as citizens because they possess the knowledge of these.

Table 9: I get useful material for my assignments/projects from the Internet

Characteristics	ABU	Mean		BUK	Mean
Strongly agreed	286 (49.1)	4.4		98 (35.0)	4.2
Agreed	258 (44.3)			168 (60.0)	
Disagreed	21 (3.6)			0 (0.0)	
Strongly Disagreed	3 (0.5)			0 (0.0)	
Don't Know	15 (2.6)			14 (5.0)	
Total	**583 (100.1)**			**280 (100.0)**	

Source: Researcher's field survey, 2015

The above table reveals that distribution reveals that the majority of respondents from ABU 544 (93.4%) agree to getting useful material for their academics online, 24 (4.1%) disagree and 15 (2.5%) did not have an opinion on the matter. The majority of the respondents from BUK totalling 224 (95.0%) agree to getting useful materials for their academic online, while 14 (5.0%) did not have an opinion on the matter. Deductively, one can argue that there is a high reliance on materials got from the Net by both ABU and BUK students. Significant to note is that no respondent from BUK disagreed to this question.

4. Discussion of findings

As can be seen in the tables and charts above, based on the general findings of this study, the Net enables students to access, retrieve, evaluate, interpret and act on information to be able to acquire informed knowledge about issues as well as build academic capacities. This is consequent upon the fact discovered that 518 (88.0%) of the respondents to the questionnaire administered in ABU and 224 (80.0%) of the respondents in BUK agree that they use the Internet regularly to chat, source for educational materials, emails and visit social media sites. From the responses, more time was devoted to searching for academic materials online (3-4 hrs daily) while the majority of respondents spent 1-2 hours daily on emails, chatting and social media (see table 6). The above therefore provides answer to the research question as to what extent students use the Internet. Thus, the extent of usage can be determined by the number of respondents who agree to use the Internet regularly. Out of the 583 (ABU) and 280 (BUK) copies of the questionnaire returned, 518 and 224 respectively use the Internet regularly (see table 5).

The response received from the questionnaire revealed that majority of respondents (91%) from ABU and (95%) from BUK attest to receiving information online that help them to acquire information to be well informed (see table 7). This supports Gimmler's (2001) position that "using the Internet as a source for news has dramatically increased the diversity and openness of information." One can therefore see the role the Internet plays in making students aware of their environment and things happening around thus making them gain a greater control of their environment and when this happens, development is in sight, as Singhal (2004) has argued. Fundamentally, it is the freedom which the Net gives that is instrumental to students acquiring knowledge to be well informed. This is because; the sharing of information which is enabled on the Net leads citizens to acquire knowledge about issues that affect them.

In trying to ascertain the role of Internet access in the academic pursuit of students, the study discovered that students find the Internet a useful resource for learning and personal development, which translates to building their capacities as citizens. Respondents to the questionnaire administered show how internet usage builds capacity, enhances academics, aid interaction and information sharing among

students, (see table 8 & table 9). Respondent revealed that the Internet has contributed immensely to their academics. Cross tabulating the findings from table 5 with that of table 7 and 9, it can be concluded that the Internet has become a vital component of the educational system today. This can be further attributed to the fact that there is hardly any institution today that students do not benefit from using the Internet as a source for materials. Again this attests to the ever increasing importance of the Internet to students - availability to and access to materials are very crucial to student's actualization of their academic dreams. This finding confirms Udende's (2010) position that the Internet enables students to solve their academic problems and likewise conveys the fact that there exists a significant relationship between students' usage of the internet and their academic performance.

However, despite its overwhelming benefit to student's academic pursuit, the issue of plagiarism as well as copy and paste has become a concern to scholarship in recent years. This perhaps stems from the understanding that as students, one of the ways to express good citizenship is to abide by the rules of scholarship. Acknowledging materials sourced is an important ethics guiding the conduct of scholarship and students must be responsible by following the rules of engagement in the academics. The implication of this is that those students who exhibit and abide by the ethics of the academics, in terms of avoiding plagiarism, are most likely to translate their good behaviours as citizens when they eventually find themselves in the outside world.

Nevertheless, the significant contribution the Net can make to the advancement of students' academic pursuit cannot be overstated. It is an advantage which should be properly appropriated. Verster (2010), while commenting on the potentials and usage of Facebook, says: "You can create a social space from where you can send notices, organize classroom events and aggregate learning feeds from any of the aforementioned tools using Facebook's built-in array of tools … You can make it your classroom's informal start page to kick-start any

formal assignment and discussion". Therefore, it is important to note that the Internet and by extension Social Media, by their very nature are drivers of social change, national development and organisational development as it possesses the capability to increase work efficiency and speed as well as reduce cost (Ikpe and Olise, 2010). Udende (2010) in a study to assess Internet access and usage among students of the University of Ilorin revealed that a large majority of the students use the Internet for academic purposes. This could be connected with the fact that users have found an enormous reservoir of information in different disciplines amid dearth of books in our libraries.

5. Conclusion

Contrary to some opinion that today's youth only use technology to meet social needs of connectivity and chatting, this study was able to establish that the youths, especially students, use the Net in ways that enhance their academics. As established in the discussion so far, the Internet helps students to become better citizens. It is the manner in which students use the Net as Netizens that shapes their lives and their understanding of who they are, what they know and what they can become as citizens of Nigeria. The students of both ABU and BUK demonstrate an understanding of the benefits using the Net brings to them as citizens. Their responses from both the instruments of questionnaire brings to the fore the overall understanding of this study that Internet use helps to enhance student's academic pursuit.

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