



## **STUDENTS' AWARENESS AND UTILIZATION OF GOOGLE APPLICATIONS IN TERTIARY INSTITUTIONS IN BAUCHI STATE, NIGERIA**

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### **ABSTRACT**

*The study investigated the students' awareness and utilization of google applications in tertiary institutions in Bauchi State, Nigeria. The research was a descriptive method of the survey type. The four tertiary institutions were randomly selected based on the zones. two research questions and two research hypotheses guided the study. The population comprised of 250 students. A questionnaire entitled "An investigation on students' awareness and utilization of google applications in tertiary institutions in Bauchi State, Nigeria" were used to collect data. The study concluded that tertiary institution students were aware and had access to google apps. Given chance, there is readiness in students to make use of Google apps for learning. The implication was that, using Google Apps for learning would transform classroom activities and would enhance the process of communication both within and outside the schools. It was recommended that awareness should be created among students for consistent with adequate information in other to leverage their competency on the technology without gender or bias and government should provide Online facilities like E-Library, large bandwidth, fiber optics cables, WIFI, subsidized branded computers and other ICT tools for students that will help them access and use to improve efficiency in learning.*

**KEYWORD:** *Students, Awareness, Utilization, Google Applications, Tertiary Institution.*

### **INTRODUCTION**

Nigeria Computer Society (NCS) opined that emerging technologies is an integral part of Information and Communication Technology (ICT) that has the potential to accelerate, motivate and engage both lecturers and students for

instruction. Some of these technologies are cloud computing, games and gamification, tablet computing, mobile learning, open content, learning analytics, three-dimensional (3D) printing, wearable technology, Massively Open Online Courses (MOOCs), Online learning, remote laboratories, Edmodo, periscope, learning management system (LMS), Google Apps for Education (GAfE) and so on (Nigeria Computer Society, 2014). The opportunities include greater access to rich multimedia content, the increase use of online course taking to offer classes not otherwise available and the availability of mobile computing devices which helps in accessing Internet. At the same time, the pace of change creates significant challenges for schools (ALIMI, 2017).

Google Apps are cloud-based productivity suites that possess feature that has the capacity to help connect users and get work done from anywhere on any device. It is simple to setup, use and manage the application. It is a suite that enables users to work smarter and focus on what really matters. Google Apps tools work together in a similar menus and functions that are related to regular generic software like Word Documents, Excel, PowerPoint, PageMaker etc. It also allows users to search more efficient with scholar, self-search, advanced search and other custom searches. It allows connection and communication with students, parents and colleagues using Gmail Google circles, Google groups among others (Yusuf, M. A., Afolabi, F. O. & Loto, 2013). Google Apps improved the general communication as it enables quick responses to queries over Gmail and access to course information via sites. This helps to break communication barriers between teachers and students. It also employs the advantages of social media via phones between lecturers and students for collaboration. Google apps could allow both lecturers and students to possess enough wealth of research, build and produce technology needed for the institutions, therefore, tertiary institutions should be equipped technologically for the twenty-first century challenges (Wikipedia, 2016).

It is a web-based application that gives room for email, calendar, drives, sites and documents collaboration for study anytime, anywhere. Google Apps for education contains some suits of productivity tools which include Google Mail, Calendar, Sites, Slides, Sheets, Doc., Forms, Drawing, Drive, Handout, Books, meet, news, Map among others. It is a tool that was designed together with teachers or lectures to help them keep online (Virtual) classes organized manage time and improve interaction with students (Jeff, 2014). Educational

Technology such as Google Apps make some important contributions to the ideal of tailoring educational methods more closely to individual's learner needs and abilities. Although, Google Apps has been deployed across the tertiary institution in the state. The typical usage of the Google Apps among students is 35%. The applications are all free and come with varying levels of privacy ranging from completely public on the web to limited only through sharing with specific contacts.

### **PURPOSE OF THE STUDY**

The main purpose of the study is to investigate students' awareness and utilization of Google Applications in Tertiary Institutions in Bauchi State, Nigeria.

### **RESEARCH QUESTIONS**

The following research questions were formulated:

- i. Are Tertiary Institution students' aware of the use of Google Apps?

### **RESEARCH DESIGN**

The study adopted descriptive survey research design. This type of research design usually involves large samples to ensure meaningful representation and description which is relevant to the study. This method enabled the researcher to find out and interpret idea the way they are without manipulation.

### **SAMPLE AND SAMPLING TECHNIQUES**

In this context, Simple random Sampling techniques was used to adopt sample population from the tertiary institutions. The institutions were selected across the three zones (Bauchi South, Central and North) of the state in other to get true representative of the tertiary institutions. The population for the study consists of 250 undergraduate students from different department across the four selected institutions.

**TABLE 1:**

Sample Population

S/N	NAME OF TERTIARY INSTITUTE	ZONE	NO. OF STUDENTS
1.	Abubakar Tafawa Balewa University,	South	100
2.	Bauchi	South	50
3.	Abubakar Tatari Ali Polytechnic,	North	50
4.	Bauchi	Central	50
	Aminu Saleh College of Education, Azare		<b>250</b>
	College of Health Technology, Ningi		
	<b>TOTAL</b>		

### **RESEARCH INSTRUMENT**

The instrument used was a 25-item questionnaire designed by the researcher titled, “investigating students’ awareness and utilization of google Applications in Tertiary Institutions in Bauchi State - Nigeria”. The questionnaire was close-ended type, which contained a set of pre-determined options to the items presented. The questionnaire contains three sections. Section A required demographic information of the respondents such as name of institution and gender. Section B contained items on students’ awareness of Google Apps. Section C contained items on students’ access to computer, Internet and Google Apps. The items were structured using Likert Scale response format range from Advanced (A), Highly Competent (HC), Moderately Competent (MC), and No Competency (NC).

### **PROCEDURE FOR DATA COLLECTION**

The data was collected in March, 2021. The researcher visited the four selected institutions and administered the instruments. The data were collected and analyzed using chi-square.

### **METHOD OF DATA ANALYSIS**

Descriptive statistics were used in the study to determine frequency count and percentages which was used on the two generated hypotheses. The criteria for

data analysis were in percentage and frequency tables which was used to assessed the response of the participants.

## **RESULTS**

The analysis and interpretation of results were presented in line with the research questions and hypothesis in table 1 and 2 as follows:

### **RESEARCH QUESTION ONE**

Are Tertiary Institutions students' aware of the use of Google Apps?

Table II: Students' awareness of Google Apps.

S/N	ITEM	NO (%)	YES (%)
1.	I have heard about Google Apps before	70 (28.0%)	180 (72.0%)
2.	I have never heard about Google Apps before	165 (66.0%)	85 (34.0%)
3.	I am familiar with the concept of Google Apps	177 (70.8%)	73 (29.2%)
4.	I am just seeing the concept of Google Apps for the first time	182 (72.8%)	69 (27.6%)
5.	I heard about Google Apps from a friend	170 (68.0%)	80 (32.0%)
6.	I heard about Google Apps Online	147 (58.8%)	103 (41.2%)
7.	I heard about Google Apps in the school	139 (55.6%)	111 (44.4%)
8.	I heard about Google Apps on a Network news	193 (77.2%)	57 (22.8%)

Table 1 showed that students are aware of Google Apps with 180 (72.0%) respondents out of the total of 250. It also reveals that the number of students who were familiar with the concept of Google Apps are 177 (70.8%). However, the results showed that students were aware of Google Apps.

### **RESEARCH QUESTION 2**

Do Tertiary Institution students' have access to Google Apps.?

Table 2: Tertiary Institution Students' Access to Google Apps for learning

S/N	ITEM	NO (%)	YES (%)
1.	I have access to a computer at home	90 (36.0%)	160 (64.0%)
2.	I have access to a computer in the school library	115 (46.0%)	135 (54.0%)
3.	I have access to a computer in the school laboratory	192 (76.8.0%)	58 (23.2.0%)
4.	I have access to Internet in the library	109 (43.6%)	141 (56.4.0%)
5.	I have access to Internet at home	130 (52.0%)	120 (48.0%)
6.	I have access to Internet on my mobile phone	110 (44.0%)	140 (56.0%)
7.	I have access to Internet in the lecture room	135 (54.0%)	115 (46.0%)
8.	I have access to Internet anywhere in the campus	129 (54.0%)	121 (46.0%)

9.	I have access to Internet through WIFI	41 (16.4%)	209 (83.6%)
10.	I have access to Internet through Fibre-optic cable	199 (79.6.0%)	51 (20.4%)

Table 2 revealed the percentages of the respondents on Tertiary Institution Students' access to Google Apps. Respondents' access to Internet through WIFI was the highest with 209 (83.6%) while access to Internet through Fibre-optic cable was the lowest with 51 (20.4%). It can thus be inferred that most of the respondents only have access to google apps through WIFI while access to it at home and other places in the academic area like mobile phone, home, library, lecture room, and other areas in the campus were 140 (56.0%), 120 (48.0%), 141 (56.4), 115 (46%) and 121 (46.0%) respectively.

## **DISCUSSION OF FINDINGS**

Despite student's awareness of and access to google application, they were not using the tool as expected. This implied that communication and collaboration within the student's would be hinder because google application was not given required attention the way it should be. It was also capable to solve problem of inadequate classroom. Application of google application for teaching and research irrespective of student's status and gender will improve learning among students.

It was revealed in the study that most of students only had access to google application through WIFI. This implies that only limited students have access to google application and thus all that google application have to offers would be underutilized. This would help stakeholder of the various institutions to put necessary facilities like Internet, power supply, larger bandwidth among others in places because they are the forerunner of google application. The finding as well revealed that students were not competent in the use of google application, this would help the stakeholders to understand the need for training.

## **RECOMMENDATIONS**

The following recommendations were made:

1. ICT resources like, very high Internet connectivity with high bandwidth should be made available in all the tertiary institutions for students to have access.

2. Awareness should be created among students for consistent with adequate information in other to leverage their competency on the technology without gender or bias.
3. Government should provide Online facilities like E-Library, large bandwidth, fiber optics cables, WIFI, subsidized branded computers and other ICT tools for students that will help them access and use to improve efficiency in classroom learning.
4. Students should motivate themselves by demonstrating high sense of commitment and readiness to use phones and other devices so as to shift from traditional way of learning to adopt new modern way of learning.
5. The tertiary institutions should across the state should signed Memorandum of Understanding (MoU) with Google and other online platform with the intention to use google apps.

## **CONCLUSION**

The finding of this study indicated that most of the students were aware of the use of Google Apps for learning but had limited access that warrant poor competency in handling some basic Applications. The success of utilizing Google apps depends largely on awareness, accessibility and competency in handling the new technology for academic use. It is of note that the decline in quality of education in Nigeria might not be unconnected with the traditional teaching techniques of lecturers (Musa, M and Ainol, 2014). With the implementation of Google Apps, students can now submit assignments via Gmail granting lecturers ability to distribute main and additional course materials through Google Docs and Google Site. It also reduced the use of paper, as course materials and assignments are sent electronically (ALIMI, 2017).

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