



Research Paper

# The Impact of Internet and ICT Facilities on Students' Academic Performance in Public and Private Universities of Kano Nigeria

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## ABSTRACT:

*Abstract; In all aspects of life, the use of internet, including education, has become common and increasingly important for students. This paper attempts to identify the different effects of internet and ICT on tertiary education. In the study, relation between the use of Internet and ICT collectively with students and their academic achievement in public and private academia in Kano universities Nigeria, investigated. The research proposed the following goals: To find out why students have been given access to Internet services, to explore how many students use internet and for how long, to describe the connection among the use and academic performance of in students. The study was performed on 302 students using questionnaire and in order to see the rate and find out if there is any association among internet and ICT facilities and students towards academic achievements, Pearson correlation coefficient, and descriptive statistics, used. The results showed that most students had laptops, personal computers, and in universities, they have Internet access. Many students stated, they used Internet in order to improve their essential skills and to carry out their learning effectively with much involvement. It has also been established that the productive use of Internets and ICT facilities has had a substantial significant impact on the students.*

**KEYWORDS:** Internet, ICT, Facilities, Universities, Public, Private, Tertiary Education, Academic performance, University Students, Printers, Scanners.

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## I. INTRODUCTION

The Internet is a global wide area network that connects computer systems across the world. It includes several high-bandwidth data lines that comprise the Internet "backbone." These lines are connected to major Internet hubs that distribute data to other locations, such as web servers and ISPs.

ICT is the acronym "information and communication technology" which means those technologies that offer the users to get the required information via telecommunications. It is far just like Information Technology (IT) however emphasizes on the whole on communication tools. It consists internet, Wi-Fi, cell telephones, and other mediums of communication". Consisting computers and vital company software, storage, audio-visible structures, middleware that allows customers to contact, shop, transfer, and manage data.

*Introductions continues.....*

The influence of Internet and practices of ICT have become a growing area of discussion in the area of IT in all the divisions especially in education. Instructors, using ICT to adapt the pedagogical techniques in order to growth performance of the pupils. Instructive institutions are adopting ICT based teaching technique and its related instructional programs for the students to teach. Students are availing the ICT services using some smart devices and the internet.

Internet has a vital part in establishing the new international economic system to provide fast changes in the world. In preceding era, at all these speeds, the Internet advanced and developed that the developing nations were unable to catch the transition anymore and were left behind and as a result of their interaction with the developed countries lagged behind. ICT entirely offers the impetus for the present world so that know-how and essential concepts of this technology are seen as an important factor of learning (UNESCO, 2002).

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So there is needed to measure the students' behavior towards Internet and ICT services usage and also its effects on the performance of students teaching, Therefore the current study is proposed to see the influence of the use of Internets on the educational performance of students in universities.

## **II. OBJECTIVES OF THE STUDY**

The key outcome of the study was to recognize the association between the use of Internet and academic performance of public and private academia students in Kano.

To achieve this objective following subsidiary objectives will be framed:

- I. Availability of internet and ICT facilities at home and university.
- II. Advantages for Using the Internet in University Education
  - ii. To identify the reasons why students access the internet and ICT services.
  - iii. To know the usage frequency of Internet by students.
  - iv. Identify the relationship between students' use of Internet and their academic performance.

## **III. LITERATURE REVIEW**

Within the past two decades, Internet and ICT combined has earned prolonged importance. The accessibility of a massive extent of facts, resources via internet, improvements of technology in the field of ICT and a prolonged pliability in organizations and corporations has intensified the knowledge boom and information worldwide. Consistent with the words of Daniels (2002) ICT has turned out to be inside a totally brief time as one of the fundamental pillars of present day society. ICT is considered as to be a source of learning simple competencies, skills and concepts by many of the countries as well as the concepts of ICT integrated with education, alongside analyzing, writing and numeracy. But, a fallacy is that ICT usually denotes to 'computer systems and computing associated sports'. This is luckily not like that, even though computers and their software play an extensive position in cutting-edge data control, other technology and/or structures also contain of the phenomenon this is normally seemed as ICTs. The Radio Assisted Instructions (RAI), Internet Assisted Instructions (IAI), CAI, TV Assisted Instructions (TAI) are some of the ICT-assisted instructions in some areas (UNESCO, 2014).

## **IV. ADVANTAGES FOR USING THE INTERNET IN UNIVERSITY EDUCATION**

*1. Gregory Hamel - Updated May 17, 2019*

Social networking, funny videos and instant messaging may be tempting distractions from schoolwork, but the Internet still offers a variety of benefits in the educational sphere. As classroom technology and online courses become more prevalent and advanced, teachers and students alike have new ways to study, plan class activities, and present information. Online classes, interactive teaching, and streamlined research methods are just a few advantages of the Internet's educational growth.

- **Going the Distance**

Hectic work schedules, family responsibilities, and commuting challenges no longer have to keep people from seeking a college degree. In 2012, a US News and World Report survey showed that roughly 62 percent of colleges offer online degree programs. Participants in a 2012 Ball State University study stated that flexible scheduling, affordability, and the ability to work at their own pace were key to their decision to take online courses.

- **Energizing Education**

Using the Internet in the classroom actually gets students more excited about learning, states the National Math and Science Initiative. Because Internet activities are often hands-on and interactive, students get the chance to directly engage with information rather than passively listen to lectures

- **Research and Reasoning**

Once upon a time, students used library card catalogs, encyclopedias and magazines to find information for projects. Today, the Internet streamlines academic research through online databases and search engines, allowing students to view the full text of scholarly publications, of research studies, and even of books right from their computers.

- **Bridging Communication Gaps**

Classroom Internet use can also help teachers say goodbye to communication mishaps such as lost assignment sheets and misplaced memos home to parents. Internet communication can make distribution of information easier, as well as increase class community and motivation, states University of Baltimore professor Hossein Arsham.

*Advantages Continues.....*

2. (Okoro&Ekpo, 2016) Internet and ICTs have the ability to originate, boost up, improve, and deepen abilities, to encourage and interact with students, so that they could be able to utilize their skills in practical fields, generate financial capability for future personnel and enhance the teaching and learning experiences.

3. According to Khan, et al (2015) Internet and ICTs have extended rise of attention of the students. ICTs has brought about revolutionary changes and totally changed the scope of education in the last few years. Most of the countries in Europe, ICT and its use has attained top level importance in education during the last decade.

4. Internet and ICT is used by teachers to guide old-fashioned learning strategies, for example, in getting information where college students are 'submissive' of information as opposed to 'active producers capable to take part within the gaining knowledge of technique.

4. (Lawsent& Vincent, 1995) It is entitled how Internet and ICT can encourage and improve the educational process. In UK ICTs use in education is emphasized due to two primary objectives.

a. First, Internet and ICT can alternate the lesson s' speed: they specified that kids want to broaden adequate capacities and talents from the new potentials provided by the use of Internet and ICTs.

b. Secondly, a huge number of students are there in UK who has the interest to contribute in research and want to learn how to operate new technologies that can expand quality of teaching and learning at educational environment so this might help the inexperienced persons to attain higher results".

## V. METHODOLOGY

This research was conducted to measure the impact of ICT on the quality of university students. The students in Kano state the most populous state in Nigeria, were a demographic sample of the higher education of public and private universities. This research consisted of a quantitative research survey and randomly selected a group of 302 students from four different universities in Kano Districts (3 publics and 1 private sectors). The frequency of respondent by gender and by sector was shown in **Table 1**. And **Table 2**, respectively.

**Table 1. Gender of Respondents**

UNIVERSITIES	FREQUENCY	PERCENTAGE %
Male	190	62.9 %
Female	112	37.1 %
Total	302	100%

**Table 2. University by sector**

SECTOR	FREQUENCY	PERCENTAGE %
Public	202	66.9 %
Private	100	33.1 %
Total	302	100 %

## VI. RESULTS AND DISCUSSIONS

### **Availability of Internet and ICT facilities for the students in Kano universities**

The students are presented with a rundown of the Internet and ICT facilities available in their home and university setting. Students have been asked to answer yes or no. Table 3 shows the results on access to Internet and ICT facilities.

**Table 3. Availability of Internet and ICT Resources Among Respondents at HOME and UNIVERSITIES.**

FACILITIES	AT HOME		AT UNIVERSITY	
	RESPONSE	PERCENTAGE %	RESPONSE	PERCENTAGE %
Availability of internet at Home and University	202	66.9 %	211	69.9 %
Availability of Laptop PCs at Home and University	160	53.0 %	153	50.6 %
Availability of Desktop PCs at Home and University	89	29.4 %	280	92.7 %
Availability of Printers/Scanners at Home and University	10	3.3 %	245	81.1%

**Table 3.** shows that the mainstream of respondents had Laptops, computer and internet services at their homes and universities. (53.0 %) which is the majority of the students had laptops. Whereas, printer and scanner services were only available to (3.3 %) of students, the services are not available to the majority of students at homes, rather these services might be used at universities. According to the university section given in table 3, majority of students (69.9 %) had internet facilities and (92.7 %) students had desktop computer facilities in their university.

## VII. RECOMMENDATIONS

There are a few recommendations for universities and other educational institutions.

1. Students should have access to the internet with high bandwidth.
2. They should also have access to the online clouds.
3. Both faculty and administration should use ICT tools that can help students to achieve greater levels of academic performance.
4. Training sessions related to ICT should be taught in the curriculum at all levels as a general study and should be made compulsory.
5. ICT centers should be established at all levels of education and should be highly equipped with efficient infrastructure, functional systems and human resources in order to achieve a high level of results.

## VIII. CONCLUSION

On the basis of result findings, it was concluded that most of the respondents had sufficient availability of Internet and ICT facilities, i.e. laptops, personal computers at their homes and computers, Printers, Scanners at their universities, but the printing, scanning facilities were less available at homes but these facilities could be availed from the university. The majority of the students in claiming that they used Internet and ICT to perform different tasks, such as preparing assignments, classroom activities and plan their lessons more efficiently. The use of Internet and ICT improves students' competencies, computer based skills that might be very supportive in improving their organizational behaviors in practical fields. Furthermore, the effective Internet and ICT use integrated with teaching and learning practice add interest, encouragement and motivation among the students that helped the students to process information in a better way and increases their understanding and expands their memory. The results of the undergoing research, it was established that Internet and ICT had a significant and positive impact on students' academic performance.

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