

Information Communication Technology and Educational System in Nigeria: Evidence from Ekiti State Nigeria

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Abstract

This study examined the students' knowledge in the use of information communication technology in Faculty of Education, Ekiti State University. The objective of the study is to investigate the attitude of students towards the use of information communication technology in the University. This study adopts a descriptive design of the survey type where population for the study consists of all students in the Faculty of Education in Ekiti State University. Stratified Random Sampling Technique is used to select 80 students from each department making a total of 640 students selected. Findings show that there is a significant difference between students' knowledge, students' attitude to information communication technology, students' knowledge of various departments, attitude of students of various departments and the use of information communication technology in Ekiti State University. As such, the study concludes that the level of students' knowledge of information communication technology is high, the attitude of students towards information communication technology usage in Ekiti State University varies and utilization of information communication technology among students are low. Based on the findings, the study recommended that School management should provide adequate functioning internet facilities and provision of wireless network so that students can have full access to internet wherever they are within the school environment.

Keywords

Student Knowledge, Student Attitude, Information Communication Technology

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1. Introduction

Development of any nation can be measured in terms of science and technological advancement. Technological growth of a nation leads to its social and economic development. In the world today, the status of a nation's science and technology has become an indicator of the nation's power and development.

The contemporary world is driven by science and technology and the two are interrelated. Science has become such an indispensable tool that no nation, developed or developing, wishing to progress in the socio-economic sphere can afford

to relegate its learning in schools.

Education is adopted as a tool for effective national development and growth so as to produce citizens that are dynamic both in thoughts and deeds, self-sufficient, effective, and united and show civil responsibility (Federal Government of Nigeria, 2007). The increasing awareness of the importance of education to the upliftment of the individual and societal standards has awakened in people and nations. A conscious effort is now being made at devoting available resources to acquire qualitative education Ekundayo, [1]

The role of science in this modern era of technology is wide

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and profound. In line with this reasoning, Olagunju, Adesoji, Iroegbu and Ige [2] as cited in Ogunleye and Babajide, [3] emphasized the importance of scientific knowledge in boosting national prestige, military might, national income and international rating of the country. According to them, science gives birth to production of micro- computers and their innovative applications which earned the developed countries such as the United State of America and Japan unparalleled national wealth potential and enviable national wealth, military potential and enviable national prestige.

The development of any nation, which depends on science and technology, hinges on the nation's science education. Science is a distinct form of creative human activity which involves distinct ways of seeing, exploring and understanding reality.

In the view of Odeleye, Olusola and Awodun, [4], science is the theory upon which the technology is built; without science, there cannot be intuition for technology. This present age has witnessed great radical and rapid scientific and technological development unprecedented in human history. The launching into space of satellites, the Industrial revolution, the invention of cars, aircrafts, sophisticated machines and weapons and above all the amazing breakthrough in Information and Communication Technology which has turned the whole world into a global village is the most recent and most remarkable of all human achievements.

Information as an economic resource has tremendous monetary values as evidenced by the information industries in developed countries. It also serves as a unifying element as its value cuts across national borders and its use is demanded by all, irrespective of nationality, educational standard and wealth. It is a commodity that adds value to products. Information is vital to the overall development of academic institutions and the general society at large Amogu, [5]. Information is the processed data which has been converted into more meaningful format, and it is the end product of data processing. For information to be meaningful in decision making, it has to be accurate, refined and appropriately packaged in order to meet the user's needs.

Despite the benefit of information technology in boosting educational system, Yahoo, 2go, YouTube, Myspace, Facebook, WhatsApp and Twitter businesses have become dangerous to the students learning as many have dropped out of the system for mere unrealistic yahoo fraudulent transactions. This has therefore become a social problem that needs urgent attention in the higher institutions of learning. Another worry that trigger the interest of this study is that student seems not to utilize technology for the improvement of their cognitive domain, which in itself has no doubt negatively affected their various academic performances and

turn demoralization effect on National development.

On this premises, this study seeks to examine the relationship between information communication technology and educational system in Nigeria using ekiti state as a case study.

2. Conceptual Mapping of ICT

Information and Communication Technology basically involves the application of the new communication and telecommunication technologies that apply the interconnectedness of computer resources and supporting equipment to process, manage and transfer information. Presently, there is a great revolution in the technological developments globally, which affect all facets of human life such as communication, education, agriculture, trade, engineering, medicine, defence and security.

Generally, the world is now a global village as a result of technological development that has affected the whole positively. Villages also have access to global store of knowledge through the Internet whereby people are able to get needed information at the right time in a right format. Presently, computer is the nucleus of Information and Communication Technology and computer serves as a single effective role in the Internet which is an ICT resource. It is worthy of note, that technologies are growing fast while Information and Communication Technology is growing faster than any other aspect of technology.

Information and Communication Technology (ICT) plays a vital role in the development of any nation. It has been a tool for achieving social, economic, educational, scientific and technological development. The desire for ICT is quite noticeable among people in different walks of life. Adedeji [6] stated that computers are available in different formats for use in hospitals, schools, businesses, universities, transports and individual homes. Computer networks are also available to provide users with a reliable means of communication and exchanging information electronically.

Abimbade [7] stated that the Federal government of Nigeria has recognized the importance of ICT in all human endeavours, a National Policy on Computer Education was established in 1988, the Policy provided the objectives, specifications, procedures and activities on the use of computer at all levels of education in Nigeria. Information and Communication Technology has greatly influenced the acquisition of knowledge and it has helped in the development of the education system, thus improving the formation of policy and also widening their range of opportunities. The relevance of ICT cannot be over emphasized as it is relevant to economic productivity and

infrastructural development, health, education, poverty alleviation, empowerment of marginalized groups, democracy and cultural transmission.

Information is power and it is also knowledge. It is important to all field of human endeavour Omotoso, [8]. It is an important commodity for an individual, organization, nation and the world over because of its role in the development of the human race. An efficient trade information service enhance exportation and importation of businesses and helps to generate foreign exchange and local currency. Information has to be accurate, relevant, complete, reliable, consistent, refine, adequate, timely and appropriately packaged in order to meet the individual needs.

Information and communication Technology and Information Technology are similar concepts that can be used interchangeably. Information Technology implies communication and therefore the two terms are synonymous Womboh and Abba [9]. Akintunde [10] described ICT as a terminology, which has overtaken information technology (IT), because of its appropriateness, and its utilitarianism. He further stated that whereas IT was the terminology used in the 80s and the 90s; (ICT) has taken over since then. The Information and Communication Technology components comprises of telephone, radio, television, optical fibres, satellite equipment, computers digital multimedia and Internet, mobile telephony digital satellite televisions, video conferencing facilities. Agagu [11] also opined that ICT includes the radios, televisions, videos, computers, sensors, interfaces, boxes, e-mails, satellite connections, internet and all the software and materials which are employed by teachers for teaching and learning.

2.1. Factors Affecting ICT Utilization in Nigerian Universities

The role of Information and Communication Technology is highly significant in the development of the whole world. Globally, ICT has dominated all spheres of life such as medicine, economic, transportation, business, agriculture, education, and a host of others.

In spite of the tremendous development achieved in the ICT sector, there are some factors affecting ICT utilization in Nigerian universities. Several research studies have been carried out on the factors that affect the ICT utilization in educational institutions globally. Taylor, Dekkers and Marshall [12] highlighted some factors that affect the use of Internet at home as geographical location, gender, education level, marital status, family income, employment status and location at home.

Tiamiyu, Ajayi and Olantokun [13], Wiberly and Jones, [14], Corbett and Williams [15], Igbaria and Parasuramen [16] in

their studies in examining factors that affect ICT, they were able to find out that gender, age, level of education, academic discipline, skill and income are the factors that affect the utilization of ICT.

Okiki and Asiru [17] are of the opinion that the factors that influence the use of Electronic information sources among students varied according to the program of their study and recognized the need for the students to carry out researches in order to excel academically.

However, demographic variables such as gender, age, level of education, and length of library experience were not significantly related to their attitude towards computers. Miles [18] presented institutional weakness and local environment as factors that determine the success or failure of ICT application. Patil [19] in her findings indicated that slow speed downloading problems and lack of training are the major problems faced while using Internets.

Mohammed [20] in her study revealed that there is more competition for band width which contributes to frustratingly slow connection speeds and finding needed information is rendered more difficult because of the proliferation of information. The availability of ICT facilities, the challenges of well trained personnel as tutors to the students is still one of the factors affecting the utilization of ICT in our universities.

2.2. Role of ICT in Students' Academic Performance in Nigerian Universities

Islam and Panda [21] stated that the application of web-based information retrieval trends of researchers is ever increasing and the electronic material will eventually replace the traditional library and users need not go there to find and collect information they need. Ansari [22] focused on the internet use by the faculty including purpose of use, impact on teaching and research, internet resources that they use and the problem faced while using the internet.

It was discovered that majority of them have been using the computer and internet for more than five years. The internet has helped them save time, find up-to-date information and compare with their colleagues. Almost all of them want to improve their internet use skill through formal training. Shahriza et al. [23] found that website is seen as an increasingly important reading source. Genoni et al. [24], in their study, indicated that the research users are positive regarding the usefulness of the internet for research purposes and for expanding their scholarly community. Over the years, the internet has become an all-important technological tool in the production, marketing, and use of information worldwide.

Bemah [25] stated that the exponential growth in information and knowledge and the corresponding increase in users'

needs have stipulated a greater degree of technological inventions and strategies towards the management, transmission/dissemination, organization and the use of information. ICT use in teaching and research has become the norm across tertiary institutions where students have been identified as stakeholders in its development and implementation Ling et al., 2001; Petrova and Sinclair, [26]; Lee and Nguyen, [27].

Universities have sought methods of developing ICT skills into the curriculum for teaching and learning of students Jerry et al., [28]. Universities and other tertiary institutions have indicated that ICT has a generally positive effect in the quality of teaching and learning, although a few have been able to offer detailed evidence. Ene [29] opines that (ICT) makes communication between persons, establishments and so on to be more convenient, faster and precise.

Ene [30] had earlier shown that this present age is an information driven age which is an era of sophisticated interconnectivity of information through the net. It is this revolution that gave birth to satellite beam of instructional radio and television to remove villages and urban classroom, video recordings of teaching sessions, the marriage of compact disc and computer technologies which enables us to have an entire library at our fingertips and to "walk" or "fly" in simulated "virtual" "reality" environments, the joining of computer networks worldwide via internet and the focus on electronic wizardry linked by information superhighways to bring knowledge in all its splendour within the reach of everyone Hackbarth, [31].

However, over two decades ago, according to Hackbarth [31] (that is, three decades from the present publication), the Carnegie Commission reported that education now faces the first great technological revolution in five centuries in the potential impact of the new electronics. Research findings have shown that ICT has helped students to learn better and has enhanced performance.

Watson [32] showed that students spend longer time in the learning task when they use ICT. Boolian [33] discovered that students who use ICT develop new strategies for problem-solving, and also develop higher order thinking skills Carthart, [34]. These findings are all reported by Aremu [35]. Afolabi, [36] observed that a random sampling of ICT in the universities in Nigeria shows that the prospects of ICT and the ideal situation of educational research in our ICT driven campus is still a mirage.

Auwal [37], in his own view, opined that there are some unique attributes offered by ICT such as for reducing isolation, facilitating dialogue, participation and fostering interactive networks. He went further to observe that those using ICT can be producers of their own information, and not

just being passive recipients. Uzo [38] sees Information and Communication Technology as major factor in shaping the new global economy and producing rapid changes in the society.

2.3. Attitude of Students Toward ICT

Attitude generally is reserved for an opinion which represents the person's overall inclination towards an object, idea or institution. Attitudes can be negative or neutral. It can be dormant and it is more generalized and may not function at all. The attitude of Nigerian undergraduates towards ICT has been generating concerns over the years. This has two dimensions: positive and negative. To this end, attitude has been defined as the way an individual feels, thinks and predisposes to act towards some aspect of his environment. Ojo [39].

Jegede and Adelodun [40] also defined attitude as a significant prediction of an essential factor in achievement in schools. Attitudes can also be considered as the cause of a person's behaviour towards a particular phenomenon can enhance human approach to such phenomenon. Attitudes can also be considered as the cause of a person's behaviour towards a person or an object. It helps to explain the consistency of a person's behaviour and is reviewed as the most culturally influenced concept and the basis for social behaviour.

There are three types of attitudes namely: cognitive, affective and behavioural attitude. Cognitive attitudes is what we actually know about an object or event, the affective attitude is what we feel about an object or event and behavioural attitude is how we behave towards an object or event.

To maintain the balance between human considerations and ICT, better understanding of the complexities of the individual perception and attitudes towards ICT becomes necessary.

The use of ICT is growing in Nigerian universities and this was supported by Lee in Popoola [41] that micro-computers will create remarkable changes in the nature of professional work. Also, Igberia and Parasuraman [42] in Popoola [41] stated that there is widespread fear and negative attitudes that have slowed the progress of ICT implementation and that many people resist using computers and other ICT technology in the Libraries.

Attitude of students towards a particular subject could be viewed as how an individual thinks and acts towards the subject. The objective of ICT resources has always been to foster favourable feelings as well as imparting cognitive knowledge.

Results of research however have shown that students show

positive attitudes towards utilization of ICT. Okereke [43] observed that a number of studies have indicated that the personality and behaviour of the teacher is very important in the formation of students attitude. Moore (1993), in a random sample of high school students concluded that impressions of a teacher towards a subject positively or negatively predicted students' attitude towards the same subject. Bolaji [44] discovered that teachers' characteristics and activities have greater effects on students' attitude towards Mathematics.

Igberia and Parasuraman [41] argue that there is widespread fear and negative attitude that have slowed down the progress of ICT implementation. Fancovilova and Prokop [45] in their study on students' attitude towards computer use in Slovakia found out that attitudes towards ICT use among schools were different. This was however not caused by the relative ratio of students counterparts. They also discovered that the effect of gender was weak, due to the fact that they found significant difference only in the behavioural dimension. They also discovered that boys were significantly more active in the use of home personal computers and that gender did not affect their use of the facility. In a nutshell, attitudes towards ICT were positive. Reasons for this may include an understanding of the benefits of the ICT in all facets of life.

Students in the university have a positive attitude toward computer. Only few participants (5-7%) reported that they did not enjoy contact with computers. Adekunle et al [46] concluded that training and knowledge are the sine qua non of a positive attitude towards ICT. Mahmood [47] recent literature discovered that students mostly use ICT for general purpose such as communication, word processing, entertainment e.t.c rather than educational purpose. It has been discovered that students do not use ICT facilities excessively for access.

Seyal, Rahim and Rachman [48] on computer attitudes of 268 non-computing students in three technical colleges in Brunei Darussalam found that computer experience and educational qualifications are associated with students computer attitudes. Variables such as gender, age, ownership of the personal computer, geographical location of institution and prior computer training appeared to have no effect on students' attitudes to ICT.

Moreover, Mahmood [47] in his analysis of data on 33 statements used to access student's attitude towards ICT found that overall attitudes of the students are positive and that the students agree with affirmative statements about ICT more than the negative statement. He also discovered that more than 90% of the students say 'Yes' to the ability to provide access to information, help in learning new things and improve communications. Jimba [49] revealed that there is no relationship between attitudes towards IT by scientists

in Nigerian Agricultural Research Institution and the value they derive from IT use. He also found no significant relationship between accessibility to IT and research productivity of the scientist. However, in this study, there was an experience and frequent use of IT of the respondents.

In a study carried out by Ehikhamenor [50] also investigated the use and non-use of Internet facilities by scientists in ten Nigerian Universities and discovered that 64.4% of the scientists had computer at their disposal while 50.4% had access to, and were using the Internet for their academic and general purpose. The non-use of Internet was attributed to problem of accessibility, ease of use and cost. He also discovered that the significant difference in Internet use by scientists is in different age groups, discipline and academic ranks. Other researchers such as Tchombe [51] found that students attitude regarding the use of ICT were positive, as evidence in the statement found that students of the Bilingual High School Lycee Bilingue Essos in Yaounde.

2.4. Utilization of ICT in Ekiti State University

The University is an institution which has numerous missions and visions such as instruction, teaching, research, experiments, knowledge sharing, capacity building and diffusion of new information and communication technology through scholarly communication. The utilization of ICT by the university students is expected to improve their education, increase knowledge skills in the utilization of technology and to decrease inequalities between groups.

Today, employers expect graduates who will be prospective employees to be ICT compliant to secure gainful employment. Therefore, the university students are to be trained in order to be relevant in the current information age. Lecturers and students need to adopt ICT to enhance teaching, learning and research activities which depend on the accessibility of the technologies Agbonlahor, [52]. Educationally, there has been an overwhelming interest in the use of electronic networks to support teaching and learning around the world by enabling computer-media conferencing and collaborative learning to take place and by ensuring access to electronic libraries (e-library) and to the multimedia education market. Omotoso [8] stated that ICT has contributed greatly to the effectiveness of distance learning which is highly relevant to developing countries where there is need to educate large numbers of geographically dispersed people.

The traditional methods of teaching can no longer meet student's demand and new technologies have demonstrated to be more effective and efficient. Teachers easily adopted the new technologies since the textbook approach to teaching and learning is out-dated. Hence, there is need for more

diversified approach to teaching and learning the Information and Communication Technologies. Taylor and Freiger [12] noted that in the future, with the advent of information age, students will not be sitting in classroom listening to the teachers, students will be moving through redesigned spaces, retrieving their own information, creatively solving their own problems, being responsible for their own learning and using teachers books, computers, global connections as a means to further enhance their inquisitiveness. The impact of ICT on education especially on teaching profession is highly overwhelming. ICT has greatly influenced education in the aspect of teaching, learning and research. The advancement in technologies has made the whole world to become a stage for learning. An earlier survey by Betiku [53] noted that the utilization of Information and Communication Technology at all levels of the education system in Nigeria is very low and below expectation. This is attributed to some constraints such as computer illiteracy, inadequacy of instructional facilities, and low level of awareness, despite the advantages of the ICT. The importance of ICT cannot be over-emphasized, since it facilitates access to unlimited current information, it enables the University students, researchers and lecturers in developing countries to bridge the knowledge gap between the developed countries through the Internet which is now the single largest information market for more people in the whole world for searching information.

Anunobi [54] carried out a survey to find out the availability of ICT in Nigerian Universities, the use made of them (application) and the distribution of such facilities with reference to the geographical location and the funding body of universities. As pointed out by Abdulraheem and Tihamiyu, [55] that “through users’ expectations of further evolution and improvement in information provision are high. Users in Ekiti State University (EKSU) were dissatisfied with the level of ICT and automated library services”. This is to say that in spite of the importance of ICT services in library. This implies that the facilities are hardly available in Ekiti State University (EKSU). ICT affords university students, researchers and lecturers the opportunity to acquire the same knowledge that their counterparts in the developing countries can acquire. Education is not left out as it has pointed out earlier, Information and Communication Technology has helped to transform the educational setting at all levels of Ekiti State University are greatly in support of the utilization of ICT and this has led to the increase in the number of computer. However, utilization of ICT in EKSU appears to be very low but there seems to be some improvement in the efforts of the University Management towards the acquisition of ICT. The adoption of any learning tools in tertiary institutions depends on awareness, willingness to utilize it and ability to use it.

3. Methodology

3.1. Research Design and Population

The study employed a descriptive design of the survey type. The research is descriptive as the study described the students’ knowledge of, attitude and use of ICT in Ekiti State University Ado-Ekiti. Descriptive research is one that describes systematically, the facts, qualities, or characteristics of a given population, event or area of interest as factually as possible to answer the questions under investigation. The population for the study comprised all students in the Faculty of Education in Ekiti State University. There are four thousand students in the Faculty of Education as at 2014/2015 academic session, which include male and female students distributed into various departments and levels. The sample for the study was 640 undergraduates from the Faculty of Education.

3.2. Reliability of the Instrument

Test-re-test method of reliability was used to ascertain the reliability of the instrument. The instrument were given to 50 students in a Faculty who would not take part in the study. At an interval of two weeks the same instrument but re-arranged was also administered on the same set of students. The scores of the two sets were computed and correlated using Pearson’s Product Moment Correlation Analysis. A reliability coefficient of 0.86 was obtained. The value was adjudged to be adequate for the study.

3.3. Data Analysis

Data collected was analysed using appropriate descriptive statistical tools such as Mean, Standard Deviation for research questions and t-test and Multiple Regression Analysis were used for hypotheses tested at 0.05 level of significance.

4. Result and Discussion of Findings

This chapter presents the analysis of data and the discussion of the findings. The study employed both descriptive and inferential statistics for the analysis of data. The descriptive statistic result is use in providing answers to each of the question accordingly and there are presented below;

Question 1: What is the level of students’ knowledge of ICT in Ekiti State University?

The result of the descriptive statistics reveal that majority of the students 529 (91.9%) have operated computer before as only 47 (8.1%) have not operated computer before. 159 (27.6%) students have formal training in ICT application

while 417 students representing 72.4% have no formal training in ICT application. Hence, it can be deduced that majority of the students have knowledge of ICT. This implies that the level of students' knowledge of ICT is high.

Question 2: What is the student's attitude towards ICT in Ekiti State University?

The result of the descriptive statistics further shows that the attitude of students towards ICT usage in Ekiti State University varies. Some love working with computer but due to inadequate knowledge, they are not encouraged to use it. From the report, we found that 81.5% of the students enjoy working with computer while 18.5% of the respondent did not enjoy working with the computer. 48.5% of the respondents agree that learning about computer is always boring to them while 51.5% of the respondents disagree that learning about computer is boring to them. 33.5% of the respondents agree that using computer to solve problems is not appealing to them while 66.5% disagree that using computer to solve problems is not appealing to them.

Table 1. ANOVA of students' knowledge and Utilization of ICT.

Source	SS	df	MS	F	Sig
Between groups	888.889	8	111.111	80.051	.000*
Within groups	786.996	567	1.388		
Total	1672.889	575			

Source: Extraction from SPSS

Table 1 shows the ANOVA of students' knowledge and utilization of ICT. The $F_{cal} (80.051) > P (0.000)$ at 0.05 level of significance. The null hypothesis is rejected. This, it shows that there is a significant relationship between the students' knowledge of and the utilization of ICT.

Hypothesis 2: There is no significant difference between students' attitude to and the use of ICT.

Table 2. ANOVA of students' Attitude to and utilization of ICT.

Source	SS	df	MS	F	Sig
Between groups	25285.333	8	3160.667	37.985	.000*
Within groups	47178.667	567	83.208		
Total	72464	575			

Source: Extraction from SPSS

Table 2 shows the ANOVA of students' attitude to ICT and utilization of ICT. The $F_{cal} (37.985) > P (0.000)$ at 0.05 level of significance. The null hypothesis is rejected, therefore there is a significant difference between students' attitude to ICT and the utilization of ICT.

Hypothesis 3: There is no significant difference in the utilization of ICT between male and female students.

Table 3. t-test analysis of Male and Female students in the utilization of ICT.

Variations	N	Mean (\bar{X})	SD	df	tcal	Sig.
Male	224	39.91	4.53	574	7.682	0.002*
Female	352	33.25	3.75			

Source: Extraction from SPSS

Table 3 shows the t-test of male and female students' in the utilization of ICT. The $t_{cal} (7.682) > P (0.002)$ at 0.05 level of significance. Therefore, the null hypothesis is rejected. Hence, there is significant difference in the utilization of ICT between male and female. From the mean, it implies that male students utilizes ICT than the female students.

Question 3: What is the level of utilization of ICT among the students in Ekiti State University?

From table 3, 81.9% of the respondents have browsed a website before while 37.6% of the respondents can access the internet. Finally, 30.8% of the respondents agreed that access to the internet facilities is easy while 69.2% of the respondents disagreed that access to the internet facilities is easy. It can be deduced from table 3 that less than half of the students utilizes ICT. This implies that the level of utilization of ICT among the students is low.

4.1. Testing of Hypotheses

Hypothesis 1: There is no significant difference between students' knowledge and the use of ICT.

In order to test the hypothesis, difference in students' knowledge and utilization of ICT were computed and compared for statistical significance using Analysis of Variance (ANOVA) at 0.05 level of significance.

Hypothesis 4: There is no significant difference between students' knowledge of various departments and the use of ICT.

Table 4. ANOVA of students' knowledge of ICT in the various departments and the utilization.

Source	SS	Df	MS	F	Sig
Between groups	438.933	7	62.705		
Within groups	1306.667	568	2.300	27.263	.000*
Total	1745.600	575			

Source: Extraction from SPSS

Table 4 shows the ANOVA of students' knowledge of the use of ICT in the various departments and the utilization. The $F_{cal} (27.263) > P (0.000)$ at 0.05 level of significance. The null hypothesis is rejected. Showing that there is a significant difference between students' knowledge of the utilization of ICT in the various departments.

Hypothesis 5: There is no significant difference in the attitude of students of various departments to the use of ICT.

Table 5. ANOVA of attitude of students of various departments towards the use of ICT.

Source	SS	df	MS	F	Sig
Between groups	48622.877	7	6946.125		
Within groups	25701.333	568	45.249	153.509	.000*
Total	74324.211	575			

Source: Extraction from SPSS

Table 5 shows the ANOVA of attitude of students of various departments towards the use of ICT. The $F_{cal} (153.509) > P (0.000)$ at 0.05 level of significance. The null hypothesis is rejected. This is showing that there is a significant difference in the attitude of students of various departments to the use of ICT. This implies that there is significant difference in the attitude of students of various departments to the use of ICT.

Hypothesis 6: There is no significant difference in the utilization of ICT among students of different departments.

Table 6. ANOVA of Utilization of ICT among Students of different Departments.

Source	SS	df	MS	F	Sig
Between groups	8387.556	7	1198.222		
Within groups	3104.213	568	5.465	219.254	.000*
Total	11491.556	575			

Source: Extraction from SPSS

Table 6 shows the ANOVA of utilization of the ICT among students of different Departments. The $F_{cal} (219.254) > P (0.000)$ at 0.05 level of significance. The null hypothesis is rejected, showing that there is a significant difference in the utilization of ICT among students of different departments. This implies that there is significant difference in the utilization of ICT among students of different departments.

Hypothesis 7: There is no significant difference in the utilization of ICT among students of different levels

Table 7. ANOVA of Utilization of ICT among students of Different Levels.

Source	SS	df	MS	F	Sig
Between groups	366.222	3	122.074		
Within groups	11125.334	572	19.450	6.276	.000*
Total	11491.556	575			

Source: Extraction from SPSS

Table 7 shows the ANOVA of utilization of ICT among students of different levels. The $F_{cal} (6.276) > P (0.000)$ at 0.05 level of significance. The null hypothesis is rejected, showing that there is a significant difference in the utilization of ICT among students of different levels. This implies that there is significant difference in the utilization of ICT among students of different levels.

4.2. Discussion

The findings of this study revealed that level of students' knowledge of ICT is moderately high. It was further revealed that that the attitude of students towards ICT usage in Ekiti State University varies. Some love working with computer but due to inadequate knowledge, they are not encouraged to

use it. This implies that students will have positive attitude towards ICT usage if they have adequate knowledge. This finding supported the opinion of Daniel [56] and Aremu [35] who opined that students will have positive attitude and be encouraged to use ICT if they have adequate knowledge of the usage.

The findings also revealed that level of utilization of ICT among the students in Faculty of Education is low. The reason why the level of utilization was low is because of inadequate internet facilities in the Faculty. More than half of the respondents agreed that access to internet facilities was not very easy. The finding was in line with that of Ogunrinde [57] who opined that reason for the low utilization of ICT among students was because of inadequate internet facilities provided by school authority.

The findings of the study also indicated that there was a difference between students' knowledge and the use of ICT. Most of the students who have the knowledge could not use ICT because the facilities are not easily available. It was revealed that there was a difference between students' attitude to ICT and the use of ICT. This implies that student who has positive attitude to the use of ICT do not have full access to ICT facilities. This finding supported the opinion of Womboh and Abba [9], Ololube [58], and Yusuf [59] who found that the vast knowledge of students in ICT and attitude to ICT does not commensurate with the usage and utilization of ICT.

The result also showed that male and female students were significantly different in the utilization of ICT. It appears that male students utilize ICT than the female students. This finding supported the opinion of Nwezeh [60] who found that female students seek the help of male students most times in utilizing ICT because male have more knowledge of ICT than female students. The finding contradicts Malaney [61], and Adedeji [6] who were of the opinion that there was no difference in ICT utilization between male and female students.

The result of the study revealed that there was significant difference between students' knowledge of various departments and the utilization of ICT. Students from various departments differ in their knowledge of ICT and utilization of ICT. Significant differences were found between the knowledge of students from one department and another department. It also revealed that there is significant difference in the attitude of students of various departments to the use of ICT. This finding is in contrary to the opinion of Abimbade [7], Agbatotun and Lawunmi [62] who all at different times indicated that irrespective of department, course of study and faculty the students belong to, they have the same knowledge of and attitude to ICT. In the other hand it supported the findings of Malaney [61] and Yusuf (2003) who all showed that there is significant difference in the

knowledge of and attitude to ICT among various departments in any tertiary institution.

Furthermore, this finding also revealed that there was significant difference in the utilization of ICT among students of different departments. Also there was significant difference in the utilization of ICT among students of different levels. This study supported the finding of Malaney [61] which showed that there was significant difference in the utilization of ICT among students of different departments and levels. The finding contradicted the opinion of Auwal [37] who opined that there was no was significant difference in the utilization of ICT among students of different departments and levels.

5. Summary, Conclusion and Recommendations

5.1. Summary

The study examined the students' knowledge in the use of ICT in the Faculty of Education, Ekiti State University. It also investigated the attitude of students towards the use of ICT in the University. The study further examined if there are difference in the utilization of ICT among the students in the various departments. In the causes of doing this, the gender difference in the utilization of ICT in the University is considered.

This study adopt a descriptive design of the survey type. The population for the study consists of all students in the Faculty of Education in Ekiti State University. There are four thousand students in the Faculty of Education as at 2014/2015 academic session, which include male and female students distributed into various departments and levels. Stratified Random Sampling Technique was used to select 80 students from each department making a total of 640 students selected.

The results of the findings are as follows:

- 1 There was significant difference between students' knowledge and the use of ICT.
- 2 There was significant difference between students' attitude to ICT and the use of ICT
- 3 There was significant difference in the utilization of ICT between male and female Students
- 4 There was significant difference between students' knowledge of various departments and the use of ICT.
- 5 There was significant difference in the attitude of students of various departments to the use of ICT.
- 6 There was significant difference in the utilization of ICT

among students of different departments.

- 7 There was significant difference in the utilization of ICT among students of different levels.

5.2. Conclusion

It was apparent from the study that the level of students' knowledge of ICT is high, the attitude of students towards ICT usage in Ekiti State University varies and utilization of ICT among students are low. Also, there is difference in the level of utilization of ICT between male and female students.

It was also concluded that Students from various departments differ in their knowledge of ICT, attitude to ICT and utilization of ICT. Also, there are difference in the utilization of ICT among students of various departments and levels.

5.3. Recommendations

Based on the findings of this study, it was recommended that School management should provide adequate functioning internet facilities and provision of wireless network so that students can have full access to internet wherever they are within the school environment.

Also, courses on ICT should be introduced into the curriculum and be made compulsory for all students. School activities should be computerized and dissemination of information should be via electronic means, this will encourage all students to have positive attitude to the use of ICT.

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