

Perceived Impact of Utilisation of ICT Facilities on Academic Performance of Undergraduates in Universities in Southwest, Nigeria

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Abstract:- The study examined the availability, accessibility and utilisation of ICT facilities on academic performance of undergraduates in Universities in Southwest Nigeria. The research design for this work was descriptive of survey type. The population comprised of all the undergraduates in the universities in Southwest Nigeria. Five hundred undergraduates were sampled from the four universities selected in Southwest Nigeria. Questionnaire was used to collect data for the study. The data collected were analysed using descriptive and inferential statistics such as frequency counts and simple percentages, mean and standard deviation while the hypothesis were tested using Pearson Product Moment Correlation, t-test, chi-square statistics at 0.05 level of significance. The results showed that the level of availability of ICT resources for academic purpose in southwest, Nigeria was moderate. The finding also shown that the level of students' accessibility to ICT resources for academic purpose was moderate and that there is no significant relationship between the use of ICT and academic performance of university undergraduates in Southwest, Nigeria. Based on the findings, the following recommendations were made; that adequate fund should be released to the Universities in Southwest, Nigeria in order to acquire the needed ICT facilities for effective teaching and learning. The management should establish ICT centre that students can access at their convenient time and the services should be extended to the school environment where the students are accommodated. The teachers should make adequate use of the available ICT facilities to teach the students for effective performance. ICT facilities should be made available and affordable in the universities in Southwest Nigeria. Personal capacity building in acquiring adequate ICT skills by the students and the teachers should be provided by the university authorities.

Keywords: Effect, Information and Communication Technology, Use, Academic Performance and Undergraduates

I. INTRODUCTION

Information and Communication Technology (ICT) has turned the whole world into a global village which has also influenced all the spheres of life positively. Researchers are of the opinion that ICT as well as more traditional Computer-Assisted Instructional applications are positively influencing students learning processes and outcomes. Isoun (2003) in his study stated that Information and Communication Technology (ICT) has comprehensively impacted its benefits on every society as the utmost change agent of human development. It is difficult world over today to think of any aspect of human

life-such as education, communication, research, banking, medicine, trade, culture, among others that are not ICT driven. In the education sector, particularly, the application of ICT has become a critical part of the learning process for university students both outside and inside the classroom setting. The government and other stakeholders in the education sector such as university management and researchers have invested millions of dollars to adopt ICT in the education system during the last two decades (Lawrence, 2015). Most universities that have fully adopted ICT have recorded immense advancement in the application of ICT for the improvement of learning methods, teaching, research and development.

A study was conducted by Nketiah-Amponsah, , Asamoah, Allassani and Aziale, (2017) on 320 undergraduate students in Ghana to find the impact of some selected ICT devices in students' academic performance. They have conducted statistical experiments such as descriptive statistics and regression in their study and found that, tools such as email intensify the student's academic performance. A study carried out by Luban (2000) indicated the experiences of graduate students teaching undergraduates who were to rate the Internet's effects on their students' academic work. He further stated that the Internet had positive influence on the number of sources found, quality of the students' written work, use of time and the grade assigned. He also observed that students have access to more information like online reference materials and sources. Internet also provides improved information on current events and the latest opinion since it is timely, easily gotten to, fun and interesting. It exposes students to a greater variety of materials and helps them to read more. Luban (2000) equally observed the negative effect of Internet as the indiscriminate use of the Internet. The application of ICT in teaching and learning in the universities has affected the academic performance of the undergraduates positively and sometimes affected some undergraduates negatively since some of the students use it to play game, watch films and sometimes yahoo activities rather than for academic activities.

II. LITERATURE REVIEW

Information and Communication Technology (ICT) is the means of accessing, receiving, storing, processing

sending ideas, transferring, of information through computers and other communication facilities. The teaching and learning process is inevitably involved in information passage from the teachers to the learners and vice versa on a regular basis. The application of Information and Communications Technology (ICTs) in education has revolutionised teaching and learning. Students with diverse learning styles are able to maximize their learning potential when instructors use ICT to support their teachings. ICT enables the learners to be more independent, reflective and self-regulated in their learning process. In addition, ICT makes it possible to deliver virtual instruction to students outside the classroom.

Centre for Applied Research in Educational Technology (CARET) highlighted research findings for frequently asked questions on how technology influences student's achievement and academic performance in relation to three primary goals:

- i. Achievement in content area learning;
- ii. Higher-order thinking and problem solving skill development;
- iii. Workforce preparation.

It was discovered that technology generally improves performance when the application directly supports the curriculum standards being assessed. Effective implementation of ICT will make standards and learning objectives explicit to the students.

CEO Forum (2001) emphasized that "technology can have the greatest impact when integrated into the curriculum to achieve clear measurable educational objectives". Also, Jagboro (2003), in her study of Internet usage in Nigerian universities, observed that both postgraduate and undergraduate students of Obafemi Awolowo University, Ile-Ife, used the CD ROM databases and the Internet for academic research purposes which had positive influence on their research work. Akawu (2010) saw ICT tools as tools for addressing challenges in teaching and learning. He said that ICT will make the students to acquire e-skills

Educators have also discovered that technology tools for constructing artefacts and electronic information and communication resources support the development of higher order thinking skills. This could be proved when students are taught how to apply the processes of problem solving and then allowed opportunities to apply technology tools to develop solutions. It is pertinent to note that the role of teachers is paramount in guiding the development of students' higher order thinking skills during learning activities involving technology tools. Cradler (1994) was of the opinion that technology will also help in preparing students for workforce whereby the school will be able to achieve their educational goals.

It is generally believed that ICT can empower teachers and students, promote change and foster the development of 21st century skills. ICT will also transform teaching and learning

process from being highly teacher-dominated to student-centred, and this will result in increased learning in students and make learning to be permanent for students. It will also allow opportunities for students to develop their creativity, problem solving abilities, informational reasoning skills, communication skills and other higher-order thinking skills.

One of the most vital contributions of ICT in the field of education is easy access to learning. With the help of ICT, students can now browse through e-books, sample examination papers, previous year papers, etc. and can also have an easy access to resource persons, mentors, experts, researchers, professionals, and peers all over the world. This flexibility has heightened the availability of just in time learning and provided learning opportunities for many more learners who previously were constrained by other commitments (Young, 2002).

ICT provides opportunities to access an abundance of information using multiple information resources and viewing information from multiple perspectives, thus fostering the authenticity of learning environments. ICT may also make complex processes easier to understand through simulations that, again, contribute to authentic learning environments. Thus, ICT may function as a facilitator of active learning and higher-order thinking (Alexander, 1999; Jonassen, 1999). The use of ICT may foster co-operative learning and reflection about the content (Susman, 1998). It is therefore necessary to encourage students to make adequate use of the available ICT resources for effective performance in their academic activities. Simond (2008), in his study on influence of Internet on the education system reported that Internet is making large amounts of information available at unprecedented speed and that if computer and the information super highway are fully utilized in the schools, teachers and students will have virtually instantaneous access to vast amount of information and a wide range of learning tools. He also stated that education is a fundamental human process; it is a matter of values and action.

The Internet has the ability to complement, reinforce, and enhance educational process. It will take the focus of education from the institution to the student. Simond (2008) concluded that all students, regardless of race, ethnic group, gender, socio-economic status, geographic location, age, language, or disability, deserve equitable access to challenging and meaningful learning and achievement. Technology has profound implications for teaching and learning throughout the school community.

When ICT is properly integrated into a broader educational programme, it would be of most important use in education as a pedagogical tool. ICT has brought about changes in most developing countries; it has introduced new methods of teaching and conducting research into our education system. It has enabled the educational institutions to adopt policies relevant to the new information age in order to achieve their goals. Nwezeh (2010) stated that ICTs have been brought into

education facilities for online learning, teaching and research collaboration. The author also observed that some university communities in some countries enjoy free or inexpensive Internet services but the Nigerian situation is quite different in that the students and faculty staff in some universities in Nigeria have to pay for time spent in accessing the Internet whether in the cyber café or in the libraries that charge less than the computer centres or cybercafé.

The field of education has been affected by ICTs, which have undoubtedly affected teaching, learning and research (Yusuf, 2005). ICTs have the potential to accelerate, enrich, and deepen skills, to motivate and engage students, to help relate school experience to work practices, create economic viability for tomorrow's workers, as well as strengthening teaching and helping schools change (Davis and Tearle, 1999; Lemke and Coughlin, 1998; cited by Yusuf, 2005). The use of ICT in educational settings, by itself acts as a catalyst for change in this domain. ICTs by their very nature are tools that encourage and support independent learning. Students using ICTs for learning purposes become immersed in the process of learning and as more and more students use computers as information sources and cognitive tools (Reeves and Jonassen, 1996), the influence of the technology in supporting how students learn will continue to increase.

The implications of the utilisation of ICT in Nigerian universities curriculum are that students and staff need to learn new skills. Lecturers need to show them how and when to use the Internet in the academic environment and how to use information stored on computers to solve problems. The management in some Nigerian universities has responded positively by acquiring ICT and encouraging the use of ICT for communication in the teaching and learning processes.

In their study on the effect of Problem-Based Learning with ICT on students' achievement, attitude, communication skill and problem solving skills in Biology, Simranjeet, Kamisah and Siti (1994) discovered that the PBL with ICT group had the highest score in the achievement test, the highest change in attitude compared to the pre-test scores. PBL with ICT group also achieved the highest score in communication skill and that the group also had a better problem skill. The implication of the above study showed that an integration of ICT in PBL is effective in teaching Biology for higher education. They further stated that ICT element helped in improving the content knowledge as students were exposed to various sources without being confined to their books.

The utilisation of ICT in Nigerian universities enhances classroom teaching-learning through the flexible classroom pedagogical interaction (Dike, 2000). Students are able to reach their teachers through the internet in that assignments and submission can be carried out via the Internet. Also, project supervisors can interact with their students through the Internet, by sending their write up into the supervisor electronic mail and necessary corrections could be made by the supervisor and who will mail it back to the supervisees for

further action. The student researchers also have access to books, journals and other research materials through the Internet. This was supported by Mohammed (2008) that "Information and Communication Technologies (ICTs) particularly the internet, intranet and other network technologies have continued to impact positively on the methodologies of library and information service delivery, education and training of information providers as well as the information needs and seeking behaviour of the information seekers and users".

Also, Kuliks (1994) observed that meta-analysis study revealed that an average students who used ICT-based instruction scored higher than students without computers and that the students also learned more in less time and liked their classes more when ICT-based instruction was applied. Attwell and Battle (1999) examined the relationship between having a home computer and school performance, for a sample of approximately 64,300 students in the United States. Their findings suggest that students who have access to a computer at home for educational purposes have improved scores in reading and Mathematics. This is to prove that the application of ICT has contributed immensely to students achievements in our tertiary institutions.

The basic effects of ICT on the teaching process as stated by Youssef and Dahmani (2008) are that it has an effect in terms of quality of student work and practical examples through visualization. It also improves poor handwriting and language skills through word processing, equalizes individual differences and has particularly dramatic effects for students with special needs and facilitates self-pacing with increased capacities to deal with individual learning styles as students can work at their own pace.

ICT has a profound impact on the process of teaching and learning in the universities. Therefore, lecturers and students should see its application as a necessity not a threat. It will make the students to acquire e-skills and to develop them in the labour market as observed by OECD 2006.

The Advantages of ICT towards Academic Performance and Achievement

Information and Communication Technology enables collaborative learning with little indication of the isolated learner encourages use of peer coaching and peer reviews. It develops communication skills and awareness of different audiences, has impact on resource-based learning and access to real world information through the web, increase information reliability and accuracy adding to authenticity of learning tasks, with realistic and up-to-date information, allows students to produce high quality multimedia products; changes teacher practices, planning tools and assessment rubrics; increases opportunities for classes to evolve and for student experiences to shape outcomes; has motivated students to communicate it, to learn and to participate in learning activities; has improved students' quality of work and has given them the confidence to perform enhanced learning

tasks; has allowed students to learn independently, which has enabled more work to be completed and has enhanced achievement due to the reinforcement and practices that ICT has afforded.

In a study investigated by Alderete and Formichella (2017) applied the propensity score matching method to identify the consequence of ICT use on academic achievement by the school students in Argentina. Their study revealed that there is no significant relationship between ICT use and academic program. So, it is evident from the literature review that, the performance may or may not improve due to ICT use; it also depends on other factors.

In addition, Li, Le, Basu and Turner (2003) added that the first web-based instruction present information in a non-linear style, allowing students to explore new information via browsing and cross referencing activities. Secondly, web-based teaching supports active learning processes emphasized by constructivist theory. Thirdly, web-based education enhanced understanding through improved visualization and finally the convenience. It could be used any time and at any place.

The influence of ICT on students' achievement has been an area focused by researchers. There are two different opinions as regards the effect of ICT on students' performance and this review will show the two sides of the coin either positively or negatively. There are some findings that demonstrated that ICT does not play any role in student's achievement in the universities. Angrist and Lavy (2002) and Benerjee, Cole, Duflo, and Lenden (2004) were of the opinion that there was no evidence of a key role for ICT in higher education while some researchers such as Fushs and Wossman (2004), Talley (2005); Coates and Humphreys (2004) were of the opinion that ICT has shown a real impact on students' achievement.

Basri, Alandejani and Almadani (2018) in their study on Consequence of ICT on students' academic outcome of four Saudi Universities was investigated by [5] in the study they have used structure equation modeling for validating their research model. Their findings show that use of ICT increases students' performance, in particular women, but the university IT course has no influence on the overall academic outcome. Information and communication technology (ICT) has become an important source of innovation and improvement of efficiency for many sectors across the globe. In the education sector, particularly, the application of ICT has become a critical part of the learning process for university students both outside and inside the classroom setting. The government and other stakeholders in the education sector such as university management and researchers have invested millions of dollars to adopt ICT in the education system during the last two decades (Lawrence, 2015).

Furthermore, Sosin, Blecha, Agawal, Bartlett and Daniel (2004) in their research stated that the utilisation of ICT has low positive impact on student performance and that some

ICT seem to correlate positively to performance while some are not affecting performance positively. It has been observed that the use of ICT in students learning process will produce better learning output and it will also enhance effective teaching and encourage independent learning on the part of the students.

Youssef and Dahmani (2008) stated that ICT use can help students exploit enormous possibilities for acquiring, for schooling purposes and can increase learning through communication. It should be noted that positive utilisation of ICT can have positive effect on students' performance when ICTs are used appropriately to complement a teacher's existing pedagogical philosophies. It has been discovered that Computer Aided Instruction (CAI) has been seen to slightly improve students' performance on multiple choice standardized testing in some areas, test scores on reading and mathematical skills. ICTs are used differently for simulations and modelling in science and mathematics, word processing and communication software in the development of students' language and communication skills.

A research carried out by Altun and Cakan (2006) to investigate undergraduate students' academic achievement, field department/independent cognitive styles and attitude toward computers shows that it is generally believed that the application of ICT into our education system will empower teachers and learners, promote change and foster the development of 21st century skills. It will transform teaching process from being highly teachers-oriented to students-centred which will lead to increase in students learning and will afford the students opportunities to develop their creativity problem-solving abilities, information reasoning skills, communication skill and other higher thinking skills.

Despite government efforts at ensuring that Nigeria as a nation embraces the use of ICT in our education system, it has been discovered that instead of leading to academic achievements of the students, it is unfortunate that the students are still performing below expectations with the introduction of ICT in our universities. The positive impacts of ICT use in teaching and learning have not been proven despite thousands of studies on the impact of ICT utilisation on students' achievement. This, however, has made it difficult to increase and give room to further investigation.

Sivin-Kachala and Bialo (2000) reviewed 311 research studies on the effectiveness of technology on student achievement. It was revealed that positive and consistent patterns when student were engaged in technology-rich environments including significant gains and achievement in all subject areas, increased achievement in pre-school through high school for both regular and special students, and improved attitudes toward learning and increased self-esteem.

It has been observed that the use of ICTs by students does not necessarily influence their performance for the fact that most of them outside the classroom use ICTs for gaming rather than for educational purposes. Students believe that

using ICTs make them more effective learners and leads to better academic performance. The researcher is of the candid opinion that, despite the positive effect of ICT on student learning, it is mandatory that ICT facilities should be made available to students in the Southwest Nigerian Universities in order to benefit maximally.

All students are expected to have an equitable access to ICT in meaningful authentic tasks that develop higher-order thinking skills. Universities' management should inaugurate technology-planning team comprising students, teachers, technologists and librarians who will see to the effective implementation of policy on how technology can improve teaching and learning to the benefit of the students, teachers, researchers and the community at large (Adomi and Kpangban, 2010). Lecturers are expected to develop themselves professionally not only to use ICT facilities but also to provide meaningful instruction and activities using technology in the classroom environment. Teachers should be allowed to go for in-service training that enables them to train on the job; this has been observed to be an effective means of skill acquisition in the operation of computers and the Internet. Integrating technology in the universities' curriculum has been observed to be a useful means of improving ICT utilisation in our universities.

The merits of ICT in education cannot be over emphasised. The use of ICT has been found to affect education positively as compiled by Jo, (2013) that it assist students in accessing digital information efficiently and effectively, support student-centered and self-directed learning, produce a creative learning environment, promote collaborative learning in a distance-learning environment, offer more opportunities to develop critical (higher-order) thinking skills, Improve teaching and learning quality, support teaching by facilitating access to course content

Factors Militating against Adequate Use of ICT Facilities

It has been observed by some researchers that despite the advantages of ICT on academic performance of the students in Nigeria universities there are some factors that militate against the availability of the facilities in the Nigeria Universities. Goshit (2006) was of the opinion that though the government planned to integrate ICTs into the school system and provide schools with infrastructure, concerted efforts have not been made to provide facilities and trained personnel. Thus, most schools do not yet offer ICT training programmes. Adomi and Kpangban (2010) also observed that "inadequate ICT manpower in the schools" was indicated by 91 respondents (52%). Goshit (2006) was also of the opinion that the main problem facing Nigeria and its ICT programme is workforce training. There are other factors militating against the utilisation of ICT facilities by the undergraduates in universities in southwest, Nigeria such as low teacher expectations and a lack of clear goals for ICT use in schools; lack of teacher collaboration and pedagogical support, as well as lack of experience among cooperating teachers; insufficient

time to master new software or integrate ICT during a class period; Insufficient skills for managing teaching materials; lack of specific knowledge about technology and how to combine it with the existing pedagogical content knowledge to support students' learning; classroom management due to large class sizes and a host of others.

Objectives of the Study

- (i) To examine the level of availability of ICT resources for academic purpose in Southwest, Nigeria
- (ii) To examine the level of students' accessibility to ICT resources for academic purpose;
- (iii) To examine the relationship between the use of ICT and academic performance of university undergraduates in Southwest, Nigeria;
- (iv) To examine the ICT related problems being encountered by the students;
- (v) To examine the solutions to ICT related problems being encountered.

Research Questions

- (1) What is the level of availability of ICT resources for academic purpose in Southwest, Nigeria?
- (2) What is the level of students' accessibility to ICT resources for academic purpose?
- (3) Is there significant relationship between the use of ICT and academic performance of university undergraduates in Southwest, Nigeria?
- (4) What are the ICT related problems being encountered by the students?
- (5) What are the solutions to ICT related problems being encountered?

III. METHODOLOGY

The study adopted a descriptive design of the survey type. The instrument for data collection was a semi-structure questionnaire comprising four sections. The questionnaire followed a four-point Likert scale type of Strongly Agree, Agree, Disagree and Strongly Disagree. The study population cut across all levels of undergraduates in the four universities in Southwest Nigeria. A total of five hundred and fifty (550) questionnaires were distributed to the students while five hundred (500) questionnaires were retrieved from the students. The questions contained therein were structured to extract information on students' perceptions of the effects of ICT on their learning and academic performance. Responses were analysed using descriptive and inferential statistics such as frequency counts and simple percentages, mean and standard deviation while the hypothesis were tested using Pearson Product Moment Correlation, t-test, chi-square, ANOVA and Scheffe Post-hoc statistics at 0.05 level of significance.

IV. RESULTS

Research Question 1: What is the level of availability of ICT resources for academic purpose in Southwest, Nigeria?

Table 1: Level of Availability of ICT resources for academic purpose in southwest, Nigeria

Availability of ICT resources for academic purpose in southwest, Nigeria	Frequency	Percentage (%)
Low	69	13.80
Moderate	358	71.60
High	73	14.60
Total	500	100

Table 1 presents the level of availability of ICT resources for academic purpose in Southwest, Nigeria. The

result shows that out of 500 respondents sampled, 69 representing 13.80% agreed there is low level of availability of ICT resources for academic purpose in Southwest, Nigeria. Those who had agreed on moderate level were 358 representing 71.60% while those who agreed on high level of availability were 73 representing 14.60%. This showed that the level of availability of ICT resources for academic purpose in Southwest, Nigeria was moderate.

Research Question 2: What is the level of students' accessibility to ICT resources for academic purpose?

Table 2: Mean rating of the Level of students' accessibility to ICT resources for academic purpose

S/N	Item	N	Agree		Disagree		Mean	SD
			f	%	F	%		
1	Consulting projects	99	182	36.4	318	63.6	2.36	0.483
2	Searching for e-book and e-journals	99	141	28.2	359	71.8	2.28	0.453
3	For assignment	99	121	24.2	379	75.8	2.24	0.431
4	Reading for examination	99	131	26.2	369	73.8	2.26	0.442
5	For social media	98	276	55.2	224	44.8	2.55	0.500

Mean Cut-Off = 2.34

Table 2 shows the level of students' accessibility to ICT resources for academic purpose. The result shows that 36.4% of the respondents agreed that they access ICT to consult projects. Also, 28.2% of the respondents often access ICT facilities to search for e-book and e-journals while 24.2% of the respondents often access the facilities to carry out the assignment. In addition, the table shows that 73.8% of the respondents disagreed that they don't access ICT facilities for examination purposes. Finally, the table shows that 55.2% of

the respondents agreed that they use ICT facilities for social media such as gaming, buying and selling, whatsApps and Facebook. The results in Table 2 are an indication that the level of students' accessibility to ICT resources for academic purpose was moderate.

Research Question 3: Is there significant relationship between the use of ICT and academic performance of university undergraduates in Southwest, Nigeria?

Table 3: Pearson's Product Moment Correlation showing the Relationship between the use of ICT and academic performance of university undergraduates in Southwest, Nigeria

Variable	N	Mean	Std. Deviation	r _{cal}	P
Use of ICT	500	13.60	2.558	0.122	0.257
Academic Performance of Undergraduates	500	17.69	4.793		

P > 0.05 (Not Significant)

Table 2 shows that r_{cal} = 0.122; p>0.05. Thus, the null hypothesis is not rejected. This implies that there is no significant relationship between the use of ICT and academic performance of university undergraduates in Southwest, Nigeria.

Research Question 4: What are the ICT related problems being encountered by the students?

Table 4: Mean rating of ICT related problems being encountered by the students

S/N	Item	N	Agree		Disagree		Mean	SD
			f	%	f	%		
1	Non availability of ICT facilities	500	381	76.2	119	23.8	2.76	0.428
2	Poor knowledge of ICT facilities	500	388	77.6	112	22.4	2.78	0.419
3	The facilities are complex to operate	500	446	89.2	54	10.8	2.89	0.311
4	Lack of accessibility to the facilities	500	418	83.6	82	16.4	2.84	0.373
5	Using ICT facilities is too expensive	500	471	94.2	29	5.8	2.94	0.237

Table 4 shows the ICT related problems being encountered by the students. The result shows that 76.2% of the respondents agreed that the ICT facilities were not available. Also, 77.6% of the respondents agreed that poor knowledge of ICT facilities is one of the problems encountered by the students while 89.2% of the respondents believed that the facilities are too complex to operate. In addition, the table shows that 83.6% of the respondents agreed that they lack access to the

available facilities. Finally, the table shows that 94.2% of the respondents agreed that using ICT facilities is too expensive since they have to pay for data before they can access the facilities. The above table agreed that the majority of the students' encountered one problem or the other while using ICT facilities for their academic activities.

Research Question 5: What are the solutions to ICT related problems being encountered?

Table 5: Mean rating of the Likely solutions to ICT related problems being encountered

S/N	Item	N	Agree		Disagree		Mean	SD
			f	%	f	%		
1	ICT facilities should be made available	500	489	97.8	11	2.2	2.98	0.141
2	The students should have good knowledge	500	449	89.8	51	10.2	2.90	0.303
3	The facilities should be users friendly	500	404	80.8	96	19.2	2.81	0.396
4	Students should have access to the ICT	500	409	81.8	91	18.2	2.82	0.388
5	Institutions should charge moderately	500	439	87.8	61	12.2	2.88	0.328

Table 5 shows the likely solutions to ICT related problems being encountered. The result shows that 97.8% of the respondents agreed that ICT facilities must be made available for the students' use. Also, 89.8% of the respondents agreed that the students should have good knowledge of the available ICT facilities for adequate utilisation by the students while 80.8% of the respondents agreed that the facilities should be users friendly. In addition, the table shows that 81.8% of the respondents agreed that students should have access to the facilities anytime the lecturers are teaching for effective learning to take place.. Finally, the table shows that 87.8% of the respondents agreed that the institutions should charge moderately for them to be able to access the available facilities.

V. SUMMARY OF THE FINDINGS

The study examined the availability, accessibility and utilisation of ICT facilities on academic performance of undergraduates in Universities in Southwest Nigeria. The study also investigates the problems encountered and the solutions to the problems. Information and Communication Technology is the network that is used in the automatic

acquisition, storage, manipulation, management, movement, control, interchange and transmission of data or information. ICT facilities availability; accessibility and utilisation are important factors in acquisition of knowledge, learning and research. The ICT facilities are the resources that are available, accessible and utilised by the students in their respective institutions.

The research design for this work was descriptive of survey type. The population comprised of all the undergraduates in the universities in Southwest Nigeria. Five hundred undergraduates were sampled from the four universities selected in Southwest Nigeria. Questionnaire was used to collect data for the study. The data collected were analysed using descriptive and inferential statistics such as frequency counts and simple percentages, mean and standard deviation while the hypothesis were tested using Pearson Product Moment Correlation, t-test and chi-square statistics at 0.05 level of significance. The results showed that the level of availability of ICT resources for academic purpose in Southwest, Nigeria was moderate. The finding also shown that the level of students' accessibility to ICT resources for

academic purpose was also moderate and that there is no significant relationship between the use of ICT and academic performance of university undergraduates in Southwest, Nigeria. Based on the findings some recommendations were made for effective utilisation of the ICT facilities towards undergraduates' academic performance.

VI. CONCLUSION

The following conclusions were drawn from the study.

Findings revealed that ICT facilities are moderately available in the institutions and most students believe in the use of ICT for academic purposes as it influenced their performance positively. The level of students' accessibility to ICT resources for academic purpose was moderate. There is no significant relationship between the use of ICT and academic performance of university undergraduates in Southwest, Nigeria. The majority of the students' encountered one problem or the other while using ICT facilities for their academic activities. The respondents agreed that ICT facilities must be made available for the students' use. Respondents agreed that the students should have good knowledge of the available ICT facilities for adequate utilisation by the students. The respondents agreed that the facilities should be users friendly. In addition, the respondents agreed that students should have access to the facilities anytime the lecturers are teaching for effective learning to take place.. Finally, the table shows that the institutions should charge moderately for them to be able to access the available facilities.

VII. RECOMMENDATIONS

Based on the findings, the followings recommendations were made:

- (i) Adequate fund should be made available to the Universities in order to acquire ICT facilities.
- (ii) ICT facilities should be made available and affordable in the universities in Southwest Nigeria.
- (iii) Personal capacity building in acquiring adequate ICT skills by the students and librarians should be provided by the university authorities.
- (iv) The management should establish ICT centre that students can assess at their convenient time and the services should be extended to the school environment where the students are accommodated.
- (v) Power supply should be made regular and standby generator should be put in place for adequate use by the students.

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