Knowledge of ICT and its Impact on Educational Development of Students in Ifelodun Local Government Area, Kwara State, Nigeria

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Abstract
Information and telecommunication technology, (ICT) is a force that has changed many aspects of human endeavors and it is putting food on the table for several families. This study investigated the knowledge of ICT and its impact on educational development of secondary school students in Ifelodun LGA, of Kwara State. The objectives of the study are to determine the level of knowledge, accessibility and impact of ICT facilities among basic school students in the study area. Descriptive research design of survey type was employed. The population comprises of basic school students in the study location. Multistage sampling technique of simple random and proportionate methods were used to select 250 respondents, researcher's structured questionnaire was used for data collection and the instrument was validated by experts and tested for reliability, which yielded 0.76. The data collected was analysed using frequency count and percentage, while the postulated hypotheses were analysed with inferential statistics of One-way ANOVA @ 0.05 Alpha level. The result revealed that the basic school students in the study area have significant knowledge based on age, ICT has more positive impact on male than female students, while basic school students J.S.S 1-3 have significant access to ICT facilities. The researcher recommends among others that children should be exposed to ICT early in their school years irrespective of gender and knowledge of ICT should be a prerequisite for employing teachers into basic schools in Kwara State.

Keywords: ICT, Knowledge, Impact, Education Development

Introduction

Information and communication technology (ICT) is a force that has changed many aspects of human endeavors. Those changes have made administrators and teachers to rethink their roles, teaching and vision for the future. The impact of ICT on various fields of human endeavor such as medicine, tourism, business, law, banking, engineering, and architecture over the years has been enormous. However, Information and Communication Technologies (ICTs) is increasingly becoming indispensable part of the education system. The educational system in Nigeria has been delineated into different levels mainly pre-primary, primary, secondary, and tertiary levels. The

increasing development of the educational system at all levels brings greater demands on educational practitioners such as curriculum planners, evaluators, and teachers particularly in their bid to move along with the information technology of the 21st century. As the world changes steadily, information and knowledge also change rapidly.

Information and communication Technology is a diverse set of technological tools and resources that is used to create, store, transmit, share or exchange information. According to Mdlongwa (2015), ICT is a global network in which ideas are exchanged, or information and knowledge are shared, through devices such as cell phones or computers, used to connect people. ICT include but are not limited to electronic machines or devices used to help the teacher achieve the set goals and objectives in teaching and learning within the shortest time (Dave & Tearle, 2015; Yusuf, 2016)

The increasing importance of ICT in improving the learning environment cannot be over-emphasized. Similarly, Secondary schools are increasingly playing a crucial role as the engine for knowledge generation and the entire learning environment. ICT has become an essential part of everyday life and hence its integration into education is inevitable and important. This is partly because all the stakeholders (teachers, students, and management team) use it for effective teaching-learning processes to achieve quality education and overall development of students or for administrative purposes. Likewise, teachers commonly agree that ICT has the potential to improve student learning outcomes and effectiveness (Chang & Wu, 2018).

ICT tends to expand access to education. Through ICT, learning can occur anytime and anywhere. Based on ICT, learning and teaching no longer depend exclusively on printed materials. Multiple resources are abundant on the Internet, and knowledge can be acquired through video clips, audio sounds, visual presentation, and so on. Current research has indicated that ICT assists in transforming a teaching environment into a learner-centered one (Lu, Hou & Huang 2019).

Several scholars such as Bamidele (2016) and Ofodu (2017) have viewed the concept of ICT from different perspectives and standpoints. The term information and communications technology (ICT) was said to have been introduced in the early 1990s to replace that of information technology (IT) in recognition of the communicating abilities and facilities offered by the computer. However, while most people adopted the term ICT, people in higher education used the term communication and information technology (C and IT) to refer to the same concept. The term ICT covers a whole range of applications, techniques, and systems. ICT consists of the 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 (Bandele, 2016)

Ofodu (2017) also refers to ICT as an electronic or computerized tool, supported by human and interactive resources that can be used for a wide range of teaching, learning, and personal use. Therefore, ICT could be interpreted from these definitions as the processing and sharing of information using all kinds of electronic devices, umbrella which includes all technologies for manipulating and communicating information. The Nigerian education sector has developments that suggest some degree of ICT adoption at the Nigerian schools. The Federal Government of Nigeria acknowledges the prominent role of ICTs in the modern world in the National Education Policy and has integrated ICTs into Nigeria's education system (Federal Republic of Nigeria, 2010). In recent times, the advancement of ICTs in high schools challenged the advanced ways and processes of teaching and learning and improved the management of education, ensuring flexibility and simplicity. ICTs have changed from being a technology of information and communication alone, to a driver of curriculum innovation and delivery system for both teachers and students.

ICT, the Internet and mobile devices are part of young people's lives, both in the school context and beyond. The Survey on the Equipment and Use of Information and Communications Technology in Homes in 2016 conducted by the Institute National Statistics (INE) indicates that 98.4% of young people (98.6% of males and 98.2% of females) aged between 16 and 24 years old use the Internet, representing a 17% increase compared to figures recorded in 2006. In the case of children aged between 10 and 15 years old, the INE establishes that in 2016,94.9% used a computer every day, 95.2% tended to use the Internet, and 69.8% had a mobile phone.

Educational development was broader than faculty development, in that it encompassed instructional, curriculum, organizational, and some aspects of faculty development. Educational development entails "all the work that is done systematically to help faculty members to do their best to foster student learning". In this sense, educational development involves policy, administrative as well as ad-hoc decisions concerning education. Every stakeholder is expected to play a distinguishing role in achieving educational development.

Education is central in the survival and growth of human beings as individuals and as a society, each with its ways and means of educating and socializing its members, as dictated by the

societal culture. Every culture has a mechanism that adjusts and accommodates new developments happening within and outside the society which ensures continuity and effective transmission of the societal culture from generation to generation and guaranteed and safeguard the survival and development of the society. Mishandling of changes happening within and outside the society may cause a significant effect on the culture of the society. The effects may cause retrogression, confusion, acculturation, or even extinction of the society in totality. In this context, each society develops and designs its educational system based on its tradition, culture, norms, and values, to suit its environment and generation, and to cater to its immediate and future developmental needs and aspirations. Consequently, as a result of development in ICT, diverse ideas and cultures interact and interwoven, as such, new knowledge, ideas, cultures, and values, are transferred from one place to another (Shu-Sha & Subrahmanyam, 2019).

Information Communication Technology (ICT) presents its material through multiple stimuli like sounds, images, and movement thus catering to the needs of psychomotor, visual, and effective learners. Radio-assisted instruction (RAI), Television-assisted instruction (TAI), Computer-assisted instruction (CAI), Internet-assisted instruction (IAI) are some of the dimensions of ICT-assisted instruction (UNESCO, 2014). Radio and television have been used for educational purposes for a long time. However, computers affected the educational process more than anything else. In addition to the audio and visual sense, the computer activates the sense of touch of the user as well. It provides the opportunity of higher interaction to the users for the development of their individual, creative, and intellectual abilities. Radio and television are now considered comparatively traditional technologies in the education system as students remain, passive learners while using these. Computers, however, provide more productive and innovative instruction and learning to enhance the intellectual and creative potentials of the students in today's information society (Haddad & Jurich, 2016). However, ICT tools used in the teaching activity are different depending on the type and purpose of the training activities and can be divided into four categories: a) Information ICT tools; b) Location ICT tools; c) ICT tools for building knowledge; d) Communication ICT tools.

Information ICT tools are those tools that enable students and teachers to access a large amount of information presented in different formats (text, images, graphics, audio and video). Location ICT tools are those methods that place the student in a virtual environment where he experiences simulated situations similar to real ones (simulations, virtual games). There are many

online applications appropriate to learning activities that meet the student's experiential learning needs. ICT tools for building knowledge include the set of tools used to manipulate the information accessed to produce their own materials needed in the learning activity. These can be materialized into personal webpages through which students and teachers can communicate their own ideas, online portfolios with different products produced by their own actions, online self-evaluation tools. The use of these tools has the purpose of forming and developing the following skills: Creating, maintaining and continuously expanding the online learning portfolio; Using online discussion forums and participating in various school debates by videoconferencing.

Communication ICT tools are these tools that provide students with the possibility to communicate, transmit and receive messages on different educational themes, allowing space or time barriers to be overcome. Selecting and using the appropriate technologies and channels to initiate and maintain communication; Participating active and effective in online forum talks and using correctly and in educational purposes of social networks. In the case of ICT knowledge, this refers to the skills learned about specific technologies beforehand, while their use gives an account of the applicability of these devices. In this sense, it is evident that ICTs as tools used by students, within the framework of the subjects, facilitate the development and strengthening of competencies, make knowledge more accessible, and concepts more appropriate. Similarly, their frequent use allows them to structure new knowledge, based on access, selection, organization, and interpretation of more complex information (Martínez, 2020).

Nowadays information and communication technologies occupy more and more areas of daily life. Knowledge of ICT enables us to access a number of IT-based services and helps to ensure success in the labour market. It also provides a considerable return to the society. Every year ICT knowledge is obtained at an earlier stage. The standard of students' computer literacy states that it is necessary for each member of the present society to have at least a basic competence of using the computer and the ability to use ICT tools for a personal and public activity (Ofodu, 2016). The use of ICT in education especially in secondary education can play a huge role in effectively and quickly transferring and receiving knowledge and in making education more universal & richer. Secondary school education is undergoing an example by integrating technology. The past two decades are assumed to have revolutionized and revitalized the secondary school education sector tremendously due to ICT based teaching-learning.

Information communication technologies are influencing all aspects of life, in which the impacts of ICT is significant in education. ICTs help expand access to education, motivate to learn, facilitates the acquisition of basic skills, and can transform the learning environment thus help improving the quality of education. ICT has tremendous potential for education. ICT enables a teacher to reach out widely efficiently and effectively. It helps teachers and institutions to be more modem and dynamic (Jazeel & Saravanakumar, 2016).

However, the impacts of ICT on educational development include, but not limited to the followings: Students are now more frequently engaged in the meaningful use of computers. They build new knowledge through accessing, selecting, organizing, and interpreting information and data. Based on learning through ICT, students are more capable of using information and data from various sources, and critically assessing the quality of the learning materials

ICT develops students' new understanding in their areas of learning. ICT provides more creative solutions to different types of learning inquiries. For example, in a class, e-books are commonly used in reading aloud activities. Learners can access all types of texts from beginning to advanced levels with ease through computers, laptops, personal digital assistants (PDAs), or iPads (Chai, Koh & Tsai 2017).

There are three important characteristics needed to develop good quality teaching and learning with ICT: autonomy, capability, and creativity. Autonomy means that students take control of their learning through their use of ICT. In this way, they become more capable of working by themselves and with others. Teachers can also authorize students to complete certain tasks with peers or in groups. Through collaborative learning with ICT, the students have more opportunity to build the new knowledge onto their background knowledge, and become more confident to take risks and learn from their mistakes.

Based on a constructive learning approach, ICT helps students focus on higher-level concepts rather than less meaningful tasks. McMahon's study (2009) showed that there were statistically significant correlations between studying with ICT and the acquisition of critical thinking skills. A longer exposure in the ICT environment can foster students' higher critical thinking skills. Thus, schools are strongly advised to integrate technology across all of the learning areas and among all learning levels. Where this is done, students are able to apply technology to the attainment of higher levels of cognition within specific learning contexts. Bandele, (2016), reported that, ICT is used as a tool for students to discover learning topics, solve problems, and

provide solutions to the problems in the learning process. ICT makes knowledge acquisition more accessible, and concepts in learning areas are understood while engaging students in the application of ICT.

Based on the extensive usage of ICTs in education the need appeared to unravel the myth that surrounds the use of information and communication technology (ICT) as an aid to teaching and learning, and the impact it has on students 'academic performance. ICTs are said to help expand access to education, strengthen the relevance of education to the increasingly digital workplace, and raise educational quality. However, the experience of introducing different ICTs in the classroom and other educational settings all over the world over the past several decades suggests that the full realization of the potential educational benefits of ICT. The direct link between ICT use and students 'academic performance has been the focus of extensive literature during the last two decades. ICT helps students to their learning by improving the communication between them and the instructors (Valasidou & Bousiou, 2015).

ICT increases the flexibility of delivery of education so that learners can access knowledge anytime and from anywhere. It can influence the way students are taught and how they learn as now the processes are learner driven and not by teachers. This in turn would better prepare the learners for lifelong learning as well as to improve the quality of learning. In concert with geographical flexibility, technology-facilitated educational programs also remove many of the temporal constraints that face learners with special needs. Students are starting to appreciate the capability to undertake education anywhere, anytime and anyplace (Bhattacharya & Sharma, 2017).

Statement of the Problem

Education is about the all-around development of an individual to be useful to himself and the society. The education in this 21st century has taken a new dimension of technological advancement due to the advent of ICT which has led to tremendous changes at the three levels of education, that is primary, secondary, and tertiary levels. The integration of ICT into the school curriculum most especially the secondary school level has led to a great impact on the educational development, enhance teaching and learning process, makes the students have access to online classes, also motivate learning by the students. In this modern world virtually, all information is available and accessible online which through the knowledge of ICT has made it very imperative

in the computer age, to keep abreast with the happenings in the world. Also, most of the state, national and international qualifying examinations are computer based nowadays, the knowledge of ICT becomes imperative to achieve desired goals in these students. Finally, children who had the opportunity to receive ICT skills early in life often have the opportunity to be self-employed after their tertiary education.

In view of the aforementioned, the researchers set out to investigate into the level of knowledge of ICT among basic school students in the study area, and also to find out the impact that the knowledge of ICT has upon their educational development.

Purpose of the Study

The purpose of this study is to investigate the knowledge of ICT and its impact on educational development of basic school students in Ifelodun Local Government Area, Kwara State.

Research Questions

The following research questions were raised to guide the study:

1. Do basic school students in Ifelodun LGA, Kwara State have knowledge of ICT based on age?
2. Do basic school students in ifelodun LGA, Kwara State have access to ICT facilities based on class?
3. Does ICT have impact on educational development of basic school students in Ifelodun LGA, Kwara State based on gender?

Research Hypotheses

The following hypotheses were tested for this study:

1. Basic school students in Ifelodun LGA, Kwara State do not have significant knowledge of ICT based on age.
2. Basic school students in Ifelodun LGA, Kwara State do not have significant access to ICT facilities based on class.
3. ICT does not have significant impact on educational development of basic school students in Ifelodun LGA, Kwara State based on gender.

Methodology

The descriptive research design of survey type was used in this study. The population comprised all basic school students in Government Secondary Schools in Ifelodun Local Government Area, Kwara State. Multi-stage sampling technique consisting of simple random, proportionate and convenience sampling technique were used for this study. Proportionate sampling technique was used to select 37 percent of all the students in the selected Government Secondary Schools for the study. Based on the recommendation of Research Advisor (2016) it says that for a population of 7,000 a sample of 248 is sufficient enough to represent the entire population at 95% confidence level and 5.0% margin of error. The researcher therefore used 250 respondents. A researcher-developed structured questionnaire titled "Questionnaire on Knowledge of ICT on Educational Development of Basic School Students" was used for the data collection. Both face and content validation of the instrument were established by three experts in the area. The researcher adopted a split-half method of reliability testing, which yielded 0.76r. Ethical principles guiding the use of human participants in the research were upheld throughout the conduct of the research. Participation in the study was made voluntary and informed consent was obtained from each participant in the study. Descriptive statistics of frequency counts and percentage was used to analyze the demographic data of the respondents and also to answer the research questions raised for the study. Inferential statistics of ANOVA was used to analyze the stated null hypotheses respectively at 0.05 alpha level.

Results

Research question one: Do basic school students in Ifelodun LGA, Kwara State have knowledge of ICT?

Table 1: Frequency counts and percentage analysis showing basic school students in ifelodun LGA, Kwara State have knowledge of ICT.

S/N	ITEMS	Yes	No	Total
5.	Knowledge of ICT helps me learn faster and better.	238 (95.2%)	12 (4.8%)	250
6.	Computer can be used to get textbooks online.	230 (92.0%)	20 (8.0%)	250
7.	There is no calculation that computer cannot do.	226 (90.4%)	24 (9.6%)	250

8	Computer can be used to teach a large and small class.	235 (94.0%)	15 (6%)	250
	Mean	**929 (92.9%) PR**	**71 (7.1%) NR**	

Key: PR= Positive Response NR= Negative Response

Table 1 shows that 929(92.9%) positively responded that basic school students in Ifelodun LGA, Kwara State have knowledge of ICT. While 71(7.1%) negatively responded to it. This implies that basic school students in Ifelodun LGA, Kwara State have knowledge of ICT.

Research Question Two: Does ICT have impact on educational development of basic school students in Ifelodun LGA, Kwara State?

Table 2: frequency counts and percentage analysis showing the result of the impact of ICT on educational development on basic school students in ifelodun LGA, Kwara State.

S/N	ITEMS	SA	A	PR	D	SD	NR
8.	ICTs help expand access to education, motivate to learn, facilitates the acquisition of basic skills.	126 (50.4%)	110 (44.0%)	236	10 (4.0%)	4 (1.6%)	14
9.	ICT enables a teacher to reach out widely efficiently and effectively in classrooms.	126 (50.4%)	101 (40.4%)	227	19 (7.6%)	4 (1.6%)	23
10.	ICTs have the potential to innovate skills, to motivate and engage students positively.	128 (51.2%)	104 (41.6%)	232	13 (5.2%)	5 (2.0%)	18
11.	ICT accelerate, enrich, and deepen the learning and teaching process.	108 (43.2%)	126 (50.4%)	234	6 (2.4%)	10 (4.0%)	16
	Mean total			**929 92.9%**			**71 7.1%**

The **table 2** showed the answer to the research question two: the mean positive response values of 929(92.9%) is greater than the mean negative response value of 71(7.1%). This implies that ICT have positive impact on educational development on basic school students in Ifelodun LGA, Kwara State.

Research question three: Do basic school students in Ifelodun LGA, Kwara State have access to ICT facilities?

Table 3: frequency counts and percentage analysis showing the result of basic school students in ifelodun LGA, Kwara State access to ICT facilities.

S/N	ITEMS	SA	A	PR	D	SD	NR
12.	I have access to ICT facilities used for teaching class subjects.	108 (43.2%)	122 (48.8%)	230	10 (4.0%)	10 (4.0%)	20
13.	I have access to computers facilities to do my class work.	126 (50.4%)	101 (40.4%)	227	19 (7.6%)	4 (1.6%)	23
14.	Access to ICT facilities improves my assimilating rate.	128 (51.2%)	104 (41.6%)	232	5 (2.0%)	13 (5.2%)	18
15.	Access to ICT facilities enables me to understand my class subjects better.	126 (50.4%)	110 (44.0%)	236	10 (4.0%)	4 (1.6%)	14
	Mean total			**925** **92.5%**			**75** **7.5%**

The table 3 showed the answer to the research question three: the mean positive response values of 925(92.5%) is greater than the mean negative response value of 75(7.5%). This implies that basic school students in ifelodun LGA, Kwara State have access to ICT facilities.

Test of Hypotheses

Hypothesis 1: Basic school students in Ifelodun LGA, Kwara State do not have significant knowledge of ICT based on age.

Table 4: One-way ANOVA on basic school students in Ifelodun LGA, Kwara State do not have significant knowledge of ICT based on age.

Model	Sum of squares	df	Mean Square	F	P-value
Between groups	18.148	3	5.345		
Within groups	2345.822	246	5.234	4.531	0.212
Total	1265.920	249			

The mean difference is significant at the 0.05 level

The table 4 above shows the result of the research hypothesis one which states that basic school students in Ifelodun LGA, Kwara State do not have significant knowledge of ICT based on age. A one-way ANOVA between groups analysis of variance was conducted to explore the impact of age group on basic school students' knowledge of ICT. Participants were divided into four

groups according to their age group that they belong to (8-11years old, 12-15years old, 16-19years old and 20-23years old). There was a statistically significant difference at the $p < 0.212$ level on basic school students' knowledge of ICT for the four age groups F= (4.531). Despite reaching statistical significance, the actual difference in mean scores between groups was quite small. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for age group 12-15years old (M = 18.9122, SD = 2.02244) was significantly different from other age group. Hence, this shows that basic school students of age range 12-15years old has more significant knowledge of ICT based on age.

Hypothesis 2: ICT does not have significant impact on educational development of basic school students in Ifelodun LGA, Kwara State based on gender.

Table 5: One-way ANOVA on ICT impact on educational development of basic school students in Ifelodun LGA, Kwara State based on gender.

Model	Sum of squares	Df	Mean Square	F	P-value
Between groups	31.248	3	3.212		
Within groups	3421.427	246	2.315	2.112	0.105
Total	2342.120	249			

The mean difference is significant at the 0.05 level

The table 5 above shows the result of the research hypothesis two which states that ICT does not have significant impact on educational development of basic school students in Ifelodun LGA, Kwara State based on gender. A one-way ANOVA between groups analysis of variance was conducted to explore the impact of gender group on basic school students' ICT on educational development. Participants were divided into two groups according to their gender group that they belong to (Male and Female). There was a statistically significant difference at the $p < 0.105$ level on basic school students' ICT impact on educational development for the two age groups F= (2.112). Despite reaching statistical significance, the actual difference in mean scores between groups was quite small. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for gender group Male (M = 18.1231, SD = 3.32210) was significantly different from other gender group. Hence, this shows that ICT has more positive impact on male educational development based on gender.

Hypothesis 3: Basic school students in Ifelodun LGA, Kwara State do not have significant access to ICT facilities based on class.

Table 6: One-way ANOVA on basic school students in Ifelodun LGA, Kwara State on access to ICT facilities based on class.

Model	Sum of squares	df	Mean Square	F	P-value
Between groups	17.448	3	4.115		
Within groups	4345.733	246	5.514	3.799	0.043
Total	3465.732	249			

The mean difference is significant at the 0.05 level

The table 6 above shows the result of the research hypothesis three which states that basic school students in Ifelodun LGA, Kwara State do not have significant access to ICT facilities based on class. A one-way ANOVA between groups analysis of variance was conducted to explore the impact of class group on basic school students access to ICT facilities. Participants were divided into two groups according to their class group that they belong to (JSS 1-3 and SSS 1-3). There was a statistically no significant difference at the $p < 0.043$ level on basic school students' ICT impact on educational development for the two age groups F= (3.799). Post-hoc comparisons using the Tukey HSD test indicated that the mean score for class group JSS 1-3 (M = 19.4561, SD = 2.71124) was significantly different from other class group. Hence, this shows that basic school students have more significant access to ICT facilities based on class.

Discussion of Findings

The following are the discussion of findings for this study;

Hypothesis 1: The finding of this study reveals that basic school students of age range 12-15years old have more significant knowledge of ICT based on age. This finding is in line with the findings of Lenhart, (2015) who reported that ICT, internet and mobile devices are part of young people's lives, both in the school context and beyond. The Survey on the Equipment and Use of ICT in Homes conducted by the National Statistics Institute (INE), in 2016, indicates that 98.4% of young people (98.6% of males and 98.2% of females) aged between 16 and 24 years old use the Internet, representing a 17% increase compared to figures recorded in 2006. In the case of children aged between 10 and 15 years old, the INE establishes that in 2016, 94.9% used a computer every day, 95.2% tended to use the Internet, and 69.8% had a mobile phone.

Hypothesis 2: Also, the study reveals that ICT has more positive significant impact on male educational development of basic school students in Ifelodun LGA, Kwara State based on gender. This finding is in agreement with the findings of Martinez, (2020) who reported that the

world is rapidly evolving with ICT. The impact of ICT at different aspects of life makes it easy and comfortable. The use of ICT in education especially in secondary education can play a huge role in effectively and quickly transferring and receiving knowledge and in making education more universal & richer. Secondary school education is undergoing an example by integrating technology. The field of education has been affected positively by ICTs, which have undoubtedly affected teaching, learning, and research. ICTs have the potential to innovate, 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 (Yusuf, 2016).

Hypothesis 3: Moreover, the findings show that basic school students in Ifelodun LGA, Kwara State have significant access to ICT facilities based on class. This finding is in agreement with the findings of Al-Ruz & Khasawneh (2019), said that accessibility of ICT equipment, time to plan for instruction, technical and administrative support, school curriculum, school climate and culture, faculty teaching load and management routine, and pressure to prepare students for national entrance exams. Among these external factors, the most common are lack of access to computers and software, insufficient time for course planning, and inadequate technical and administrative support.

Conclusions

The findings of the study indicate that age plays a significant role in the knowledge of Information and Communication Technology (ICT) among basic school students aged 12 to 15 years, with older students demonstrating greater familiarity with ICT concepts and applications. Furthermore, the impact of ICT on educational development is observed to be more pronounced among male students in basic schools within Ifelodun Local Government Area (LGA), Kwara State, suggesting a gender-based disparity in the benefits derived from ICT exposure. Additionally, students in Junior Secondary School (JSS) classes 1 to 3 in Ifelodun LGA are shown to have access to ICT facilities, with access levels varying according to their academic class, thereby highlighting the role of grade level in influencing ICT accessibility and usage.

Recommendations

Based on the conclusion of the study, the following recommendations were made:

1. All basic school students irrespective of their age bracket should be given more opportunity to learn and have more knowledge of ICT.

2. There should be more impact of ICT on educational development of female students as well in order to ensure gender balance and stability.

3. Senior secondary students should be allowed to access ICT facilities as well in order to improve their learning capacity within the school.

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