



## INFORMATION AND COMMUNICATION TECHNOLOGY: A TOOL FOR JOB OPPORTUNITIES FOR YOUTHS IN TERTIARY INSTITUTIONS

By

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### Abstract

Information and Communication Technologies (ICTs) play a crucial role in enhancing youth learning, creating job opportunities, and shaping the global economy. This study examines the use of ICT as a tool for youth employment in tertiary institutions, focusing on students from the Federal College of Education, Akoka, Lagos, and the Federal University of Oye Ekiti. A random sampling technique was used to select 50 students from each institution, totaling 100 respondents. A structured questionnaire served as the data collection instrument, which was validated for relevance and clarity. The study addressed three research questions using frequency counts and simple percentages. Findings reveal that ICT tools equip youths with technical skills such as architectural design, website development, and marketing, enabling them to generate income. ICT fosters employment opportunities by allowing students to develop innovative technological ideas through education and training. A 2010 UN report supports the integration of ICT across all academic disciplines to enhance employment prospects beyond computer science. The study also reveals that increased ICT usage, alongside stable electricity and internet access, significantly reduces youth unemployment rates in Africa. ICT skills empower students to contribute to their social and economic well-being while promoting national development. The study concludes that digital literacy programs should be prioritized and promoted in tertiary institutions to enhance youth employment opportunities and economic growth.

**Keywords:** Information and Communication Technology (ICT), Youth employment, Digital literacy

### Introduction

Information and communication technology (ICT) is seen as one of the 21<sup>st</sup> -century tech that gives room to drive modern society. ICT has made the world a media-saturated, expertise, dependent, and globally allied world which has led to content creation, social interaction, critical thinking, collaboration, etc. becoming part and parcel of the education sector, alongside other sectors all over the countries. UNESCO (2012) aims to ensure that all countries, both developed and developing, have access to ICT facilities is Important to prepare both young and adults to enable them to participate in all activities in the society and to contribute to the knowledgebase of the nation as a whole. ICTs, owing to their capacity no doubt improve youth learning processes. It is worth mentioning that students of

secondary schools and tertiary institutions are showing passionate interest in harnessing all the experiences that ICTs can offer (Adomi & Kpangban, 2010). These include the skill for economic sustenance. Education without enablement is like a gorgeous talking drum without skillful performer or beat said by Chinedu Nebo). According to Abbas (2024) the Millennium Development Goals (MDGs) and its Sustainable Development Goals (SDGs) are possible and practicable if youths are well-incorporated with ICT facilities. Information and communication technologies (ICTs) in this era are seen as a factor that helps in shaping the new global economy and producing rapid changes in society. According to Fakunle & Ayodele (2017) ICT drives the education of youths as it is possibly an influential tool for spreading



educational and job opportunities, both on sight and online, business environments and open up job opportunities and also provides governments with an efficient infrastructure. Austins and Tygris, (2010) opined that ICT has helped to raise the economy of the nation, especially the Gross Domestic Product (GDP).

ICTs no doubt are changing the landscape of work in both developed and underdeveloped countries for the youths by creating new job openings, new learning environments in the education sector and promoting advancement, inclusion, and globalization of the world's system in line with this Ajagbe., Adesina., Odule & Agbele, (2021) also affirmed that ICTs also create jobs and use as a tool that enables youths to access new sorts of work which can make them creative and flexible in the work.

Being without a job after graduating from tertiary is indeed an obligatory idleness of wage earners who are able and enthusiastic to work but cannot find jobs. In societies in which most people can earn a living only by working for others, being unable to find a job is a serious challenge. The rate of unemployment in developing countries especially in Nigeria is very high because the proportion of unemployed shows how well a nation's human resources are used which may serve as an index of economic movement (positive or negative). Unemployment has called for a greater concern in the Nigeria economy and this have constitutes a series of serious developmental difficulties.

The major policy of the government and the international agencies is targeted at reducing the rate of unemployment but without vocational training of youths while in school because earning a living could be accomplished by suitable training in vocational studies and encouraging them for internships with experienced professionals, or the exhibition of abilities. Some of the career training options that youths can be exposed to include POS services, online goods monitoring and goods delivery, Sales of phones, computer parts and accessories, repairs and maintenance of phones and computers, networking, programming and document and excel processing (Okolie et al., 2020). With this ICTs can making difference and contribute to the social and economic livelihood of youths in tertiary institutions in Nigeria. In a

rapidly changing world with ICT, basic education is essential for an individual to be able to access ICT tools and make use of it judiciously for interactive education which enhances the potential its usage to reduce youth unemployment. According Mungadze (2024) Information and Economic Commission for Africa has indicated that the ability to access and use ICT tools is no longer a luxury, but a necessity for development as it create job opportunity for citizens especially the youths in and out of school. However, it has been observed that, many developing countries, especially in Africa, are aware of ICT but are still lacking behind in its application and usage due to lack of ICT-based training which invariably increases unemployment of graduates and low income among the working ,class without full knowledge of ICT and its usage and it is against this back drop that this study is carried out to examine Information and Communication Technology as a tool for creating job opportunities for youths in tertiary institutions.

#### **The objectives of the study is to**

The main objective is to examine Information and Communication Technology as a tool for creating job opportunities for students in Federal College of Education, Akoka, Lagos. Other objectives are to:

- i. examine how ICT can promote youth employment.
- ii. ascertain Information Communication Technology (ICT) tools for job opportunities
- iii. examine the ICT applications that can be used in the enhancement of social and economic livelihood of youth in Nigeria

#### **Research Question**

The following research questions will guide this study.

- i. How can ICT promote youth employment?
- ii. What are the Information Communication Technology (ICT) tools that can be used for job opportunities?
- iii. What are ICT applications that can assist in social and economic livelihood of youths in tertiary institutions in Nigeria?



## LITERATURE REVIEW

### Concept of ICT and Youth

There is no doubt that information and communication technology (ICT) fosters development which becomes more broadly acknowledged. According to Wade (2001) ICT is seen as techno-quick-fix for solving development problems that have spanned generations. While in the opinion of UNDP (2001) ICT is basically information-handling tools which are varied sets of goods, applications and services that are used to produce, store, process, distribute and exchange information. ICT is any communication channel or application that has to do with information storage and dissemination. Such channels include radio, phones, computers, television, and network infrastructures. To Ugwoke (2011) hypothesizes ICT as a set of technological apparatuses and resources used to communicate, disseminate, store and manage information. It is equally an embracing idea that includes hardware, software, processes and people that are into technologically oriented communication. Ekoja (2007) refers to ICT as the equipment used for collecting, processing, storing, transmitting, and gaining access to information which has given Educators and Learners from different parts of the world wonderful opportunities in information management and use. This ICT equipment include radio, telephone television and the new ICT of satellite, computers, and wireless technology as well as social media platforms and the internet. These different tools combine to form our network world, a massive infrastructure of interconnected telephone services, standardized computing hardware, the internet, radio and television which reaches into every corner of the globe. ICT constitute an important sector of economic activity, achieving high growth rates in developed as well as in developing countries. Nagy (2003) posited that ICT is seen as a powerful tool for mobilizing civil society and a networking infrastructure that can connect, empower and coordinate as well as deliver all kinds of services which youths can leverage on for employments. He maintained that this ICT networking infrastructure is also a delivery channel for reaching the poor and remote areas with more responsive and cost effective public services. Given the concept ICT, thus, it

has become an unavoidable avenue to evaluating global prevailing and ground-breaking technologies, be it information or communication, which support and sustain empowerment. Youth on the other hand is a concept that connotes different meanings, youths are seen as the strength of the nation. UNESCO, (2012) defines youth as a era of evolution from the dependence of childhood to adulthood independence and consciousness of independence as a member of a community. In another vein, United Nations, 2015 defines youth as those persons between the ages of 15 and 24 years without bias to other definitions by member states. Onwumere and Adigwe, (2017) within the context of African Youth Charter (2006) research agreed with the United Nations stipulated ages of 15-24 and further see youth as between the age where he or she may leave required education, that is, primary and secondary education, and the age at which the person can find and accept first employment. While we accept the United Nations 'statistical basis for definition of youth, and the fact that it is —socially constructed category (Furlong, 2013).

### ICT and employment

ICT has the capacity to provide career opportunities for youth to start their own business because ICT tools, especially mobile technologies, helped develop full new business models for youths, such as establishing micro-markets in disadvantaged areas by ordering goods and services in bulk using mobile phones. ICT further helps to connect local manufacturers of goods and services with global markets. ICT shares a fundamental relationship with empowerment which leads to employment (Agbonifoh & Okafor, 2006 & Ogbonna, etal 2023). According to Yusuf, M. O. (2005). Recent innovations in web based ICT technologies mean that the provision of software-based services becomes a real opportunity for economic growth for both small and large enterprises as the use of the internet becomes more and more pervasive. Such services will increasingly be provided through service providers that have the necessary networks and ICT infrastructure to host web services for many companies and provide access on a metered pay-as-you-go basis. New systems architecture, new web software and high-speed networking enable



all this to happen on much more favorable economic terms thus providing a real incentive for utilization by enterprises (Anderson, 2010)

The impact of ICT on business in the global economy is determined by the extent to which ICT is utilized to enhance entrepreneurship as ICT represents a unique knowledge-based social infrastructure for the global digital economy. Youth empowerment aims to improve quality of life and improving this streamlines quality of life participation in ICT programs is vital. With this, ICTs provide the youth with the necessary information and podiums for decision-making and encourage active participation in harnessing and coordinating empowerment. As, Oyekanmi, (2006). states that economic empowerment instills entrepreneurial skills, how to be in charge of their assets and how to have income security and also states five capabilities of a healthy youth which include positive sense of self, self-control, decision-making skills, a moral system of belief and pro-social connectedness. All these competencies and income security are achievable if the youth have the right of entry to information, communication and technology. The world is known to be a global village because of information and communication technology existence. Information is power as it equips youth with facts, abilities, and consciousness essential to make conversant decisions about their schooling, vocations and civic duties. Without access to information, youths in the society remain deprived and powerless to harness opportunities that could develop their progression and supports for the society while technology is the effective apparatus for improving, aiding, and increasing openings or opportunities for youth engagement in society. This is the stand on which any meaningful and important youth enablement stands.

### ICT Tools for Job Opportunities in Nigeria

Taking youth in Nigeria through ICT tools can be very impactful, knowing the country's large youth population and the increasing importance of technology in several aspects of life. Some are the ICT tools identified by Onwumere (2010) that could contribute to youth empowerment in Nigeria.

1. E-learning platform: This platform offers a wide variety of courses on several

subjects, from academic topics to vocational skills where youths can gather or have new knowledge or skills that will enable to be self-employed or be employed. Access to platforms such as Khan Academy which is a free online learning platform that offers courses in subjects like math, science, economics, history, and computer programming, with interactive exercises and video lessons., Coursera, Udemy edX, etc. can help Nigerian youth acquire new abilities and knowledge, improving their employability and entrepreneurship potential.

2. Entrepreneurship and literacy Apps: These are apps that thrive to help youth manage business finances, save money and can also enable them to access microloans to build any ICT skills learnt. Platforms like the Tony Elumelu Foundation Entrepreneurship Program which has been in existence for long provides mentorship, resources, and funding for young entrepreneurs in Nigeria.
3. Mobile Apps for Skills Development: These types of apps deals with flexible learning options that suit the eventful existences of many youths in Nigeria. There are numerous mobile apps aimed at teaching explicit skills such as digital marketing, coding, graphic design, and language learning. Example of such Apps includes SoloLearn for coding and programming courses, Duolingo for language learning, and Canva for graphic design. This enables Nigerian youth to navigate different skills for employment.
4. Digital Health and Wellness Apps: These apps enable one to monitor the importance of health and well-being, especially in any pandemic or epidemic and beyond. Youths that have or gain access to Apps like Ada Health which is an health assessment platforms that provides personalized health guidance by analyzing symptoms and medical history, Wellvis a digital health platform that provides access to medical advice, health assessments, and telemedicine services., and 7 Cups can



provide youth with access to healthcare information such as mental health support, and wellness resources. With this youths get busy and shun evil vices.

5. Digital Libraries Online Resources: Digital libraries and online resources such as Google Scholar, JSTOR, ResearchGate, etc. can facilitate research and learning for Nigerian youth if they can skillfully navigate them, especially youths in tertiary institutions. These resources can sustain academic pursuits and foster principles of research, innovation and collaboration.
6. Open Data Platforms: These are Nigeria's Open Data Portal that enables Nigerian youths to identify trends of positive things, analyze data and promote data-driven decision-making, develop innovative solutions to societal challenges and promote entrepreneurship or small-scale business.
7. Cybersecurity Awareness and Skills Training: Exposing students or youths to the importance of cybersecurity, providing youth with the consciousness and skill training through platforms like Cybrary and Coursera can help protect their environments from online fear or threats and prepare them for careers in cybersecurity.
8. Social media and Networking Platforms: ICT tools like LinkedIn, Twitter, and Facebook can be powerful tools for networking, small-scale business, career progress, and information or knowledge sharing. Nigerian youth can take advantage of these platforms to connect with experts, join important and relevant communities, and access cherished resources and opportunities to be productive in the society.

With these ICT tools, Nigerian youth can increase their skills, knowledge, and opportunities for personal and professional development, in the long run contributing to the socioeconomic development of the society and the country as a whole.

### **Ways ICTs can assist in the social and economic livelihood of youths in tertiary institutions in Nigeria.**

Leveraging ICT effectively by youths in tertiary institutions in Nigeria goes a long way to empower youth's economic livelihood as it provides access to large of information and educational resources that can enable them to improve their skills and knowledge beyond the four walls of schools. As Jafari-Sadeghi, Kimiagari, & Biancone (2020) opines that with ICT youths can access online courses. Tutorials, and educational resources or materials which allow flexible learning schedules and self-spaced learning for lifelong learning. According to Okolie, etal, (2020) and Hosman, (2010) ICT tools platforms can assist in accessing financial services, entrepreneurship training, mentorship, and access to online marketplaces, empowering students or youths to kickstart their own businesses and become economically independent while in school and after school. Students can be equipped with relevant skills or knowledge such as data analysis, programming, word and excel processing, digital marketing to enhance their employability. ICT can enhance assist youths in schools in such a way that they will engage in remote internships, freelance work, or part-time jobs, providing them with valuable work experience and income chances while studying as work from home is the order of the day now. Olutola and Olatoye (2020) are of the opinion that students connect with peers, mentors and professionals with the aid of ICT tools such as social media, online forums and collaborative platforms in fostering collaboration, knowledge sharing, career and job opportunities. ICT tools such as social media networks play a vital supporting role in facilitating to offset some of the traditional challenges that youth face in employment opportunities, however, there are challenges using ICT as an enabler for youth socioeconomic development as these challenges may include lack of necessary ICT facilities due to lack of funds or supports, limited access to reliable internet connectivity, lack of ICT expertise in ensuring long-term satisfactory performance in tertiary institutions, lack of long-term human capacity building leading which can lead to lack of knowledge on how to the ICT facilities, inadequate digital literacy skills and



sometimes, lack of awareness by students of what kind of positive information and services that can be accessed via ICT to improve their lives and livelihood, lack of interest from the youths cultural or social barriers, additionally, lack of keeping up with rapid technological advancements which can be discouraging (O'Neil, 2002).

**RESEARCH METHODOLOGY**

Research Design for this descriptive survey design. The sample technique used for this study is a random sample. Technique which used to select 50 students across 200 and 300 level students in Federal College of Education, Akoka, Lagos and 50 students across 300 and 400 level students to allow each of the population have an equal and independent chance of being

represented. The total population of this study consists 100 of students. The research instrument used for this study is a self-designed questionnaire which diligently seeks the response of the respondents. The questionnaire is divided into two sections namely A and B. Section A contains personal information of student such as group type, Gender, Religion, and Age, while section B contained a structured statement followed by four Likert scale model response (Strongly Agree, Agree, Disagree, Strongly Disagree) to obtain data on the subject matter. The questionnaire personally distributed by the researcher and retrieved through the same process and frequency counts and simple percentage was used to analyze the data collected.

**Findings and Discussions**

**Table 1: Gender distribution table**

Sex	Frequency	%
Male	34	34
Female	66	66
Total	100	100

Table above shows that 34 of respondents (34%) were male while 66 of respondents (66 %) were female. Therefore, majority of the respondents were female.

**Table 2: Age and distribution table**

Age	Frequency	%
18-20 years	70	70
21-23 years	23	23
24 years and above	7	7
	100	100

The table above shows that 70 of respondents (70%) were 18-20years, 23 of respondents (23%) were 21-23 years while 7 of respondents (7%) were 24 years and above. Thus, majority were 18-20years and this is in line with United Nations (2015) stipulated age range for youths.

**Table 3: How ICT can promote youth employment**

s/n	Items	SA	A	SD	D
1	ICT skills equip youths with innovative ideas	47(47%)	43(43%)	4(4%)	6(6%)
2	ICT inculcate digital marketing skills in youths	29(29%)	58(58%)	2(2%)	11(11%)
3	ICT provide avenue for academic content writing which make youths to busy	25(25%)	57(57%)	6(6%)	12(12%)
4	ICT skills add value to the students when used by them for products and services	32(32%)	55(55%)	6(6%)	7(7%)



5	ICT stands as opportunities for skilled students to have access to various job opportunities	62(62%)	16(16%)	5(5%)	17(17%)
6	Information technology skills help students to develop simple web sites for daily leaving	38(38%)	43(43%)	5(5%)	14(14%)
7	ICT creates loan platforms for youths to access to expand their small scale businesses	25(25%)	37(37%)	10(10%)	28(28%)
8	ICT gives room for entrepreneurship skills for students	43(43%)	47(47%)	3(3%)	7(7%)

Table 3 above indicates that majority percentage of the respondents agreed that ICT tools can promote youth employment to create employment for youths while minority percentage of the respondents disagreed. In the work of Mohammed and Sadiq (2015) they ascertained that ICT tools provide youth with technical knowhow of architectural design in building simple websites, and marketing skills

thereby earning a lot of money from their clients. It also provides job opportunities for the youth where maintenance and repairs are being carried out by the youth with this, students who are educationally open to ICT and use the technology effectively for their own personal development, the development of their communities, and the overall growth of the country.

**Table 4: ICT tools that can be used to create employment for youths**

SN	ITEMS	SA	A	SD	D
1	E-learning platforms	25(25%)	50(50%)	10(20%)	15(15%)
2	Open Data Platforms	22(22%)	60(60%)	5(5%)	13(13%)
2	Social media and Networking Platforms	22(22%)	40(40%)	9(9%)	29(29%)
3	Digital Libraries Online Resources	25(25%)	44(44%)	9(9%)	22(22%)
4	Mobile Apps for Skills Development	19(19%)	68(68%)	3(3%)	12(12%)
5	Cybersecurity Awareness and Skills Training platforms	29(29%)	55(55%)	6(6%)	10(10%)
6	Digital Health and Wellness Apps	23(23%)	55(55%)	6(6%)	16(16%)
7	Social media and Networking Platforms	26(26%)	61(61%)	6(6%)	7(7%)
8	Entrepreneurship and literacy Apps	39(39%)	42(42%)	6(6%)	13(13%)

Table 4 shows that majority of the respondents agreed that ICT tools can be used to create employment for youths in tertiary institutions while minority disagreed with the statement. This is in line with Hosman (2010) who affirms that ICT is considered as an important tool in creating employment opportunities for youth because ICT

education for youth is accompanied by life skills education, including competencies in using it in making informed decisions, solving problems, thinking critically and creatively, communicating effectively, and building interpersonal relationship as they are likely to have more limited business networks and contacts.

**Question 3. ICT applications and contribute to the social and economic livelihood of youths in tertiary institutions in Nigeria.**

**Table 5**

SN	ITEMS	SA	A	SD	D
1	E-learning	20(20%)	55(55%)	6(6%)	19(19%)
2	Job portals	22(22%)	48(48%)	9(9%)	25(25%)



2	Entrepreneurship activities	40(40%)	35(35%)	6(6%)	19(19%)
3	Research tools	38(38%)	44(44%)	9(9%)	10(10%)
4	Financial services	60(69%)	23(23%)	7(7%)	10(10%)
5	Networking	50(50%)	22(22%)	10(10%)	8(8%)

Table 5 reveals that majority percentage of the respondents agreed that these applications identified can significantly contribute to the socioeconomic development of youths in tertiary institutions by enhancing their education, employability, Entrepreneurship, research capabilities, financial management and networking opportunities while a minority percentage disagreed. From the findings it is obvious that education enhances the potential of ICT usage and can significantly contribute to the social and economic livelihood of youths in tertiary institutions in Nigeria to reduce youth unemployment creating employment for youths which is in line with the findings of Krubu and Osawaru (2011) who posited that ICT is an essential entrepreneurial strategy for youth which enable students possessed ICT skills for empowerment which aims at improving quality life of youths and Financial services which contribute and Facilitate financial inclusion, enabling students to manage finances, receive payments for entrepreneurial ventures, and access loans or savings plans to better their socioeconomic status.

**Discussions of findings**

According to findings it is evident that Information and Communication Technology can be a tool for creating job opportunities for youths in tertiary institutions as this was ascertained by Mohammed and Sadiq (2015) that ICT tools provide youth with technical knowhow of architectural design in building simple websites, marketing skills thereby earning a lot of money from their clients Also, Nagy, (2003) affirmed that the use of ICT brings new employment for youths and also give opportunity to develop new ideas in the use of technology using education system via training facilities and inexpensive access to computers. With this approach, youths will have the opportunity to be entrepreneurial in different skills as they are being exposed to entrepreneurship through the use of information and communication technology. It was also

evident that ICT tools can be used to create employment for youths in tertiary institutions as the 2010 UN report stated that it is very important to integrate technology throughout academic curricula so that technology becomes part of every discipline, including the humanities, instead of being restricted to computer sciences as this will help the employments of thousands of youths in tertiary institutions.

Finally, the results shows that ICT applications are seen to contribute to the social and economic livelihood of youths in tertiary institutions in Nigeria as the higher use of ICT tools with good electricity and network lower the level of youth unemployment in Africa and this translate to enhanced employability, economic enablement, and better quality of life for youths in Nigeria and Africa as a whole.

**Conclusion**

Youth employment remains a critical element of sustainable development and should be a top priority on every government’s agenda. there is no doubt that ICT represents an opportunity for governments to enable socioeconomic development which can enhance to improve education, help prepare youth with the skill sets to find employment in a knowledge-based economy and provide career opportunities in all sectors including ICT sector itself as ICT offers content and tools for youths and educators to assist in interactive learning experiences and job employments. It also facilitates learning experiences through workshops, webinars and e-courses and also offers collaboration tools for events, networks, campaign and site for research, development and best-practice sharing on youth engagement to students shift from being passive recipients of information to active participants in the learning process by this students move away from social ills in the country, get them busy with different ICT skills acquired to enable them contribute to socio-economic activities and positive growth of the society and the country at large.

**Recommendations**



- i. ICT programs in schools should be well funded and well supported by the government to develop the students' technology skills and job creation.
- ii. The government should ensure that ICT policy statements are translated into reality. An ICT policy implementation commission should be created at all levels of education in Nigeria.
- iii. ICT Infrastructures of institutions should be improved upon
- iv. Digital literacy programs should be well grounded and promoted in tertiary institutions to pave the way for youth employment.
- v. Promoting inclusivity in technology should be adopted.
- vi. Long-term human capacity building should be put in place to maximize the use of ICT facilities and tools to boost the interest of the youths.
- vii. Computer/ICT education should be made compulsory at all levels of education.

## REFERENCES

- Abbas, H. S. M., & Xu, X. (2024). Multiethnic integration: A path toward achieving sustainable development from the global perspective. *International Journal of Sustainable Development*, (32) 5, 4315-5893  
<https://onlinelibrary.wiley.com/toc/10991719/2024/32/5>
- Adomi, E. E., & Kpangban, E. (2010). Application of ICTs in Nigerian secondary schools. *Library Philosophy and Practice*, 1–8. Retrieved.  
<https://digitalcommons.unl.edu/libphilprac/345>
- Anderson, D. (2010, June 23–25). National e-government strategies: Application of ICT in government in achieving the Millennium Development Goals. *Speech presented at the United Nations Public Service Day and Forum on the Role of Public Service in Achieving the Millennium Development Goals*, Barcelona, Spain.
- Agbonifoh, B.A. & Okafor, C.A. (2006). Time management abilities and practices among managers. *Nigeria Management Review*, 17(1), 15 12-1529.
- Ajagbe, S. A., Adesina, A. O., Odule, T. J., & Agbele, K. K. (2022). Development of an Improved School Information Management System. *FUW Trends in Science & Technology Journal*, 7(1), 120-132.  
<https://www.ftstjournal.com/arcsrch.php?req=Volume+7+Issue+1+%282022%29>
- Austins, M. B. & Tygris, T. Y. (2010). Youth empowerment through ICT entrepreneurial involvement. *Journal of Social Enterprise Initiative*, 2(3), 61-83
- Nebo, N. (2023).  
<https://ikengaonline.com/2023/07/21/nebo-urges-enugu-youths-to-embrace-digital-literacy-skills/>
- Ekoka, L. & Montague, R (2002). Library and Information Science Education. *Encyclopedia of Library and Information Science* 3(5), 1645 -1656.  
[https://www.researchgate.net/publication/343476465\\_Utilization\\_of ICT\\_for\\_Economic-empowerment\\_among\\_Youths\\_in\\_Lokoja\\_Metropolis\\_Kogi\\_State](https://www.researchgate.net/publication/343476465_Utilization_of ICT_for_Economic-empowerment_among_Youths_in_Lokoja_Metropolis_Kogi_State)



- Fakunle E.A. & Ayodele F.O (2017). The Use of ICT in national development: Review of Literature  
[https://www.academia.edu/31425318/THE\\_USE\\_OF\\_ICT\\_IN\\_NATIONAL\\_DEVELOPMENT\\_Review\\_of\\_literature?utm\\_source=chatgpt.com](https://www.academia.edu/31425318/THE_USE_OF_ICT_IN_NATIONAL_DEVELOPMENT_Review_of_literature?utm_source=chatgpt.com)
- Mohammed, A. & Sadiq, A. M. (2015). The role of information and communication technology (ICT) in providing job opportunities for youth in the developing world. *Journal of Emerging Trends in Engineering and Applied Sciences*, 6(7), 19-25. Retrieved from <https://hdl.handle.net/10520/EJC174449> January, 2025
- Hosman, L. (2010). Policies, partnerships, and pragmatism: Lessons from an ICT-in-education project in rural Uganda. *Information Technologies & International Development*, 6(1), 48–64.
- Jafari-Sadeghi, V., S. & Biancone, P. P. (2020). Level of education and knowledge, foresight competency and international entrepreneurship: a study of human capital determinants in the European countries. *European Business Review*, 32(1), 46-68.
- Krubu, D.E. & Osawaru, K.E. (2011). The impact of information and communication technology (ICT) in nigerian university libraries. *Library Philosophy and Practice*, 6(3) 583.
- Mungadze (2024). Economic commission for africa aims to empower 65million workers with digital skills.  
<https://itweb.africa/content/xnkLOvz1ZWYq4Ymz>
- Hanna, N. K. (2003). Why national strategies are needed for ICT-enabled development. *World Bank*, 3, 22-27.  
[https://www.researchgate.net/publication/237431218\\_Why\\_National\\_Strategies\\_are\\_needed\\_for\\_ICT-enabled\\_Development](https://www.researchgate.net/publication/237431218_Why_National_Strategies_are_needed_for_ICT-enabled_Development)
- Ogbonna A. E., Idris A. A., Tirimisiyu F. O. & Kazeem O. I. (2023). Information and communication technology (ICT) and youth unemployment in Africa. *Quality & Quantity*, 57:5055–5077
- Okolie, U. C., Nwajiuba, C. A., Binuomote, M. O., Osuji, C. U., Onajite, G. O., & Igwe, P. A. (2020). Career advice and guidance can facilitate career development in technical, vocational education, and training graduates: The case in Nigeria. *Australian Journal of Career Development*, 29(2), 97-106.
- Olutola, A. T., & Olatoye, R. A. (2020). Faculty members' perception of the ease of use and usefulness of ICT in teaching. *Journal of Educational Research*, 65(2), 113-128.
- O'Neil, D. (2002). Assessing community informatics: A review of methodological approaches for evaluating community networks and community technology centers. *Internet Research*, 12(1), 76–102.  
<https://doi.org/10.1108/10662240210415844>
- Onwumere A.A. & Adigwe, A.I. (2017). ICT and youth empowerment in nigerian. *Journal of Public Administration and Social Welfare Research*, 2 (1) 2504-3597.
- Onwumere, A. A. (2010). The role and application of some ict instructional packages in teaching english language in nigerian secondary schools: Problems and Prospects. *Journal of Educational Media and Technology*. 14(2):109-115.
- Oyekanmi, F. (2006). Nigeria: ICT facilities in good economy. *AllAfrica*.  
<http://allafrica.com/stories/2006/250076.html>
- Ugwoke, F. N. (2011). *Resources for teaching information and communication technology (ICT) related courses in library schools within Southeast Nigeria* (Master's thesis). Department of Library and Information Science, Faculty of Education, University of Nigeria, Nsukka.  
[https://www.academia.edu/85661194/Use\\_of\\_ICT\\_facilities\\_for\\_teaching\\_library\\_and\\_information\\_science\\_courses\\_at\\_the\\_University\\_of\\_Uyo\\_Nigeria?uc-sb-sw=2624560&utm\\_source=chatgpt.com](https://www.academia.edu/85661194/Use_of_ICT_facilities_for_teaching_library_and_information_science_courses_at_the_University_of_Uyo_Nigeria?uc-sb-sw=2624560&utm_source=chatgpt.com)
- UNESCO (2012). Information and communication technology in education. A curriculum for schools and program for teacher development. Paris: UNESCO  
United Nations Department of Economic and Social Affairs, & Global Alliance for ICT and Development. (2009). *A digital shift: Youth and ICT for development best practices*. United Nations.  
<https://www.youthpolicy.org/library/documents/a-digital-shift-youth-and-ict-for-development/>
- Yusuf, M. O. (2005). Information and communication technology and education: Analyzing the Nigerian National Policy for Information Technology. *International Evaluation Journal*: 6(3), pp. 316 – 332.