



Contribution Of Information And Communication Technology In Achieving Adult Education Programmes In Nigeria

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ABSTRACT

The study explores the critical role of Information and Communication Technology (ICT) in enhancing adult education programs in Nigeria. The integration of ICT into adult education offers innovative solutions to address the challenges of illiteracy and skills development among adults in a diverse and rapidly evolving society. ICT facilitates access to a wide range of educational resources through online platforms, mobile learning applications, and multimedia tools, making education more accessible, especially in remote and underserved areas. Additionally, ICT enables flexible learning environments, allowing adults to learn at their own pace and convenience, which is crucial for those balancing work and family commitments. However, the effective implementation of ICT in adult education in Nigeria faces significant challenges, including limited infrastructure, inadequate internet connectivity, and the high cost of digital devices. Furthermore, disparities in digital literacy among learners and educators hinder the full potential of ICT integration. This paper highlights the need for strategic investments in ICT infrastructure, targeted digital literacy training.

Keywords: Information and Communication Technology and Adult Education.

INTRODUCTION

Adult education refers to the provision of instructed learning events for adults after earlier terminated or interrupted education within the regular education system (Oyebamiji, 2012). According to Seya (2014). Adult education is a transmission process of general, technical or vocational knowledge, as well as skills, values and attitudes, which takes place outside the formal education system with a view to remedying early education inadequacies of mature people. Adult education is instructional and related support services for adults who are not enrolled in the school. It is for adults who lack the educational foundation expected of a high school graduate (Ugwuzor, 2016). An adult educator nowadays uses advanced technology in facilitating the teaching and learning processes in adults' education.

The process of using advanced technology in everyday education provided us with opportunities to support teaching and learning (Abidet *al.*, 2022). According to Sharma and Barret (2017), the use of technology is the great motivation in teaching and learning process. In addition, technology can promote language learning with fresh, authentic and motivating materials directly usable from the Internet (Miladiyah, 2017). Internet usage, especially, directly impacts the use of online resources. This implies

that the more the number of internet users found in a given country, the greater the indication that more online resources are being used (Amponsahet *al.*, 2022). The use of ICT to enhance learning and improvement of students' capacities is an ongoing educational pursuit by educators, especially since the turn of the 21st century (Soetan & Coker, 2018).

ICT means information communication technology. Oyeet *al.* (2012) defined ICT as forms of technology that are used to transmit, store, create, share or exchange information. Tamilselvan and Sevukan(2012); Owolabi *et al.*, (2012) and Basriet *al.*, (2018) related the term in relation to this age as the Information age that is characterized by the free flow of information made possible by the recent adoption, application and utilization of modern media such as audio, visual, graphical, or multimedia through technological gadgets for transmitting, managing, processing, storing, retrieving and dissemination of information (Iroaganachi & Izuagbe, 2018; Omere *et al.*, 2020). ICT use in the adult literacy classroom changes the way students learn. Students are no more confined by the physical blocks of the classroom, rather, they simulate to a distant places and learnt its events, geography, etc through the use of ICT. This is strongly believed to increasing learning opportunities unlike it was without ICT (Raman, 2011).

Conceptual Clarification

Concept of ICT

Information and Communication Technology' (ICT) first appeared in the mid-1980s and was defined as "All kinds of electronic systems used for broadcasting telecommunications and mediated communications" with examples including personal computers, video games, cell phones, internet, and electronic payment systems and computer S/W, etc (Singh,2018).ICT is made of computer and communication technology. Computer technology is the tool for storing and processing information in digital form, while communication technology helps us to transfer and disseminate digital information (Dutton, 2001; Singh, 2018).

Additionally, ICT means a variety of technological applications in the process and communication of information. The word, ICT, is a combination of three words information, communication and technology. Information means knowledge, and technology means the use of computers and communication means process of sharing knowledge. Therefore, the term, ICT, can be defined as "the integration of computing, networking, and information processing technologies and their applications in sharing information from a source to its destination. "Information Communication Technology is conceived as the fusion of two technologies: They are Information Technology (IT) and Communication Technology (CT) (Francis, 2020).

ICT is otherwise conceived as a combination of computer applications and communication technology for gathering, processing, storing, and disseminating Information. Information Communication Technology is a common term referring to the technologies used for collecting, storing, editing, and communicating information in various formats. ICT means the use of computer-based technology and the Internet to make information and communication services available in a wide range of users. ICT isa Hardware and Software enable society to create, collect, consolidate, and communicate information in a multimedia format and for various purposes. The term ICT includes any communication device or application, encompassing radio, TV, cellular phones, computers and network, hardware and software, satellite systems, and so on, and the various associated services and applications (Osu, Udosen, and Akpan, 2010). ICT is playing a vital role in the current and future development of society and nation. ICT has affected all spheres of life and also the library. Information and communication technology (ICT) is a diverse set of technological tools and resources used to communicate and create, disseminate, store, and manage information. Information and communication technologies (ICTs) are often associated with the most sophisticated and expensive computer-based technologies. ICTs are basically information-handling tools- a varied set of goods, applications, and services that are used to produce, store, process, distribute and exchange information. ICT-Information and Communication Technology is a varied collection of

technological gear and resources used to communicate. They make use of generating, distributing, collect and administer information.

According to Anyakoha (1991), information technology is “the use of manmade tools for the collection, generation, communication, recording, re-management, and exploitation of information. It includes those applications and commodities by which information is transferred, recorded, edited, stored, manipulated or disseminated”. ICT is a means that has changed many aspects of the way we live. ICT includes computer hardware, software, application of telecommunication technologies, projection devices, Local Area Networks (LAN), Wide Area Networks (WAN), digital cameras, Compact Disks (CDs), Digital Video Disks (DVDs), cell phones, satellites, and fiber optics. Digital Technologies are not a single technology. It is a combination of two or more technologies in that system. Some of these new ICT and digital technologies are as follows:

Multimedia PCs, Lap Top, Notebook

- ✓ Combination of Internet connectivity with PCs and laptops

Digital camera/video

- ✓ connected with PCs and laptop

LAN and WAN

- ✓ Internet and Intranet

WWW (World Wide Web)

- ✓ Internet
- ✓ Online Databases
- ✓ Video conferences
- ✓ E-mail, discussion lists, and newsgroup, and chat
- ✓ Digital Libraries
- ✓ E-books / E-journals/ E-databases

Floppies, CDs, and DVDs

- ✓ Offline databases

Cell Phones

- ✓ With an Internet connection, digital camera, and moving pictures

E-books / E-journals/ E-databases

Computer-mediated conferences

- ✓ Video conferencing
- ✓ Telemedicine

Virtual reality

Telecommunication satellites

Interactive TV and Radio

Concept of Mass Media

Mass media refers to various means of communication that reach and influence large numbers of people. This includes traditional media such as newspapers, magazines, television, radio, and cinema, as well as newer forms like the internet and social media. (McQuail, D. 2010). Mass media plays a significant role in shaping public opinion, disseminating information, and influencing cultural norms and trends. However, Bagdikian, B. H. (2004) assert that, Mass media refers to various communication channels that reach large, diverse audiences simultaneously. This includes traditional platforms like newspapers, television, radio, and magazines, as well as digital media such as the internet and social media. Mass media plays a crucial role in disseminating information, shaping public opinion, and influencing cultural norms. It serves as a bridge between the public and information sources, providing news, entertainment, education, and advertising by shaping perceptions and opinions, mass media holds significant power in society, impacting everything from politics to consumer behavior and social trends.(Livingstone, S. 2009).

UTILIZATION OF ICT IN PROMOTING ADULT EDUCATION PROGRAMMES

Felician and Anthony, (2020) reported that the presence of advanced technology helps to learn well what have been taught by their tutors in the class. This is because they see clearly and capture the concept effectively from the advanced tools used in the class especially basement classes and Elimu hall where many learners prefer to have session there.

Andrew and Ojo, (2018) reported that the use and introduction of ICT in adult education is less but it was ascertained that ICT contributes a lot in human endeavors.

Canon and Ike, (2015) pointed out some of the areas in which ICT may be of relevance to education especially on adult education included: Access to variety of learning resources, ICT helps in a great way in accessing plenty of resources to enhance teaching skills and learning ability (Owolabi *et al.*,2013).

ICT has helped in the provision of audiovisual education. It learners are encouraged to regard computers as tools to be used in all aspects of their studies. They make use of the new multimedia technologies to communicate ideas, describe projects and other information in their work. Immediacy of information: In this time of computers and web networks the rate by which knowledge is imparted is very fast which also enhances education anywhere at any time. Information and data desired for any study are obtained at will and when needed. · Anytime learning: ICT aids one to study whenever he/she wills irrespective of whether it is day or night and whether the teacher is available or not.

ICT KNOWLEDGE AND SKILLS FOR ADULTS EDUCATION IN NIGERIA

The benefits of ICT in adult education are that ICT can:

1. Offer opportunities for more adult-learner-centred teaching. There is a common belief that the use of ICT in adult education will contribute to more constructivist learning and an increase in activity and greater responsibility of the adult learner.
2. Provide the adult educator with new sources of information and knowledge which will enhance the process of and practices of teaching adults. This is because acquisition of ICT knowledge and skills can help the adult educators to obtain basic knowledge of principles of teaching and learning and the skills to apply those principles in teaching- learning situations.
3. Provide adult learners the opportunity for distance learning country-wide with on-line educational materials even in the face of their tight schedule of activities.
4. Help in providing adult-learners with additional resources to assist resource-based learning e.g., the fax, telephone, computers, e-mail, internet, WWW (World Wide Web) etc.
5. Broaden access to quality educational services for adults at all levels of adult education.
6. Help in producing ICT literate adults who will be useful to themselves and contribute meaningfully to the society in which they belong.
7. Produce adults who are capable of working and participating in the new economies and societies arising from ICT and related development.
8. Help education policy makers in formulating and execution of educational policies which will be inclusive in nature to bridge the gap in education.
9. Widen the range of opportunities for the marginalized and the disadvantaged members in the society by opening access to knowledge.
10. Encourage self-directed learning because adults can engage in personal learning by using their personal computers or internet connection.
11. Help adult learners to have access to tutorial software.
12. Help in improving the effectiveness and efficiency in adult education system in Nigeria as a whole (Kozma, 2005).

In addition, adult learners can use ICT in business transactions and other human endeavors activities that require ICT for their accomplishment and achievement of goals. Thus, for adults not to be left out in what is happening in the world they are to key in into the use and application of this technology and this can only be achieved through the integration of ICT into adult education in Nigeria (AndrewandOjo,2018).

MASS MEDIA AND THEIR APPLICATION IN PROMOTING ADULT EDUCATION PROGRAMMES IN NIGERIA

In Nigeria, mass media serves as a powerful tool for promoting adult education programs, addressing the challenges of literacy and skill development among adults. The country faces significant educational disparities, with many adults lacking basic literacy and numeracy skills. Mass media, including television, radio, and increasingly, digital platforms, play crucial roles in reaching diverse populations and fostering educational opportunities. (Livingstone, S. 2009).

Furthermore, Katz, E., & Lazarsfeld, P. F. (1990). Television remains a prominent medium in Nigerian households, making it an effective channel for broadcasting educational content. Educational programs tailored for adults can be aired during prime-time slots, targeting both urban and rural viewers. These programs can cover a range of subjects from basic literacy and numeracy to vocational training and health education. By leveraging television, adult education initiatives can engage a broad audience and reinforce learning through visual and auditory means.

According to Castells, M. (2009), Radio is another widely accessible medium across Nigeria, is instrumental in reaching remote and underserved communities where literacy rates may be lower. Radio broadcasts can feature interactive sessions, interviews with educators, and storytelling formats that engage listeners and facilitate learning in culturally relevant contexts. Programs can be structured to include call-in segments where listeners can ask questions or participate in quizzes, enhancing interactivity and retention of educational content.

In addition McQuail, D. (2010), opined that, Digital platforms, including social media and mobile apps, are increasingly popular among Nigerian adults, especially younger demographics. These platforms offer opportunities to deliver educational materials in interactive formats, such as short educational videos, podcasts, and online courses. Social media campaigns can raise awareness about adult education programs, encourage participation, and provide avenues for feedback and community-building among learners.

While Couldry, N., & Hepp, A. (2017), promoting adult education through mass media, collaboration between educational institutions, government agencies, and media organizations is crucial. Strategic partnerships can ensure the production of high-quality educational content, effective dissemination strategies, and monitoring of program impact. by harnessing the reach and influence of mass media, Nigeria can effectively address educational gaps among adults, empower communities, and foster socio-economic development across the country.

ISSUES IN ICT AND MASS MEDIA APPLICATION IN ADULT EDUCATION PROGRAMMES IN NIGERIA

In Nigeria, the integration of Information and Communication Technology (ICT) with mass media in adult education programs faces several challenges and issues. While ICT and mass media hold immense potential to enhance educational outreach and effectiveness, several barriers hinder their widespread application. (Castells, M. 2009). Infrastructure limitations pose a significant hurdle. Access to reliable electricity and internet connectivity remains uneven across the country, particularly in rural areas. Without consistent power supply and internet access, the implementation of online learning platforms, digital content delivery, and interactive educational tools becomes challenging. This digital divide exacerbates educational disparities, limiting the reach of ICT driven adult education initiatives. Technological literacy among adult learners varies widely. While younger generations may be more adept at using digital devices and navigating online resources, older adults and those in remote communities often lack familiarity with ICT tools. Effective integration of ICT in adult education requires tailored training programs to build digital literacy skills among learners, educators, and program administrators.

Furthermore, Bagdikian, B. H. (2004), the cost of ICT infrastructure and devices remains prohibitive for many individuals and educational institutions in Nigeria. Affordability issues hinder the widespread adoption of technology-driven learning solutions, restricting access to quality educational resources and opportunities for skills development among adults. cultural and linguistic diversity necessitates the

adaptation of ICT and mass media content to local languages and cultural contexts. Nigeria boasts hundreds of ethnic groups and languages, requiring educational materials to be culturally relevant and linguistically accessible to effectively engage diverse adult learners.

However, Castells, M. (2009), stated that, addressing these issues requires concerted efforts from government agencies, educational institutions, and private sector stakeholders. Initiatives focused on improving infrastructure, expanding internet access, providing affordable ICT devices, and promoting digital literacy are essential to harnessing the transformative potential of ICT and mass media in advancing adult education in Nigeria. Through strategic partnerships and innovative approaches, Nigeria can overcome these challenges and leverage ICT to empower adults with essential skills and knowledge for personal development and socio-economic advancement.

CONCLUSION

The role of information communication technology in the development of the field of adult education was explored. The technology can enhance theory building and enrich the future of the profession. It is evident that ICT empowers citizens to continuously adapt to community, national and global developmental challenges, as well as to develop the required knowledge, skills associated with life-long learning and community development. There is need for the appropriate integration of ICT in adult education settings.. Integrating ICT in adult education programmes would provide everyone with basic skills and to use such new technologies during development training, workshop, seminars, conference, teaching and learning environment.

Suggestions

1. There is need to investigate the current state of ICT infrastructure in Nigeria, particularly focusing on its availability and accessibility in both urban and rural areas. Examine how this infrastructure supports or hinders the delivery of adult education programs.
2. Need to Identify and analyze specific case studies or success stories where ICT has been successfully integrated into adult education programs in Nigeria. Explore the factors that contributed to their success, such as funding, technology adoption, pedagogical approaches, and community engagement.
3. Conduct a comprehensive impact assessment of ICT interventions in adult education. Use qualitative and quantitative methods to measure outcomes such as learning outcomes, retention rates, access to educational resources, and overall program effectiveness.
4. There is also need to investigate the challenges and barriers faced in implementing ICT in adult education programs in Nigeria. This could include issues related to digital literacy, connectivity gaps, and cultural attitudes towards technology, funding constraints, and policy frameworks.
5. Analyze the existing policy and institutional framework surrounding ICT integration in adult education in Nigeria. Evaluate the role of government policies, educational institutions, NGOs, and international organizations in promoting ICT-enabled learning opportunities for adults.

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