



Synopsis of Benefits and Challenges of Information Communication Technology (ICT) in Adult Education

Madaki Yusuf Muhammad, Uba Yakubu, Alao Modupe Mopelola
Department of Adult and Non-Formal Education
School of Adult & Non-Formal Education /Special Needs Education,
Federal University of Education, Zaria

ABSTRACT

The paper highlighted some of the benefits and the challenges facing the use of information, communication and technology (ICT) in adult education. Therefore, the paper being conceptual in nature gives some clarification regarding the terms of ICT and as well as adult education. The findings revealed that, opportunities for more adult-learner-centred teaching, equipping the adult educator with new sources of information and knowledge, participation in economy related development, and encouraging self-directed learning, among others are benefits of ICT in adult education. The findings also indicated that, challenges facing the use of ICT in adult education are several kinds. Some are related to the adult facilitators, some to the adult learners and others to the learning centers.

ARTICLE INFO

Article History

Received: January, 2025

Received in revised form: March, 2025

Accepted: May, 2025

Published online: June, 2025

KEYWORDS

Adult Education, Information,
Communication Technology, Challenges
and Benefits

INTRODUCTION

Information Communication Technologies (ICT) are computer systems and internet connections that manage and communicate information for educational purposes. In other words, ICTs are a type of technology that aids in tasks that include the generation, storage, manipulation, and transmission of information. Information recording, storing, processing, retrieval, and transmission are all made possible by ICT (Gijbels, Raemdonck, Vervecken & VanHerck, 2012). It comprises both newer technology like computers, telephones, the internet, facsimile machines, and microelectronics as well as outdated ones like mechanical accounting machines, printers, etc. The society is undergoing dynamic transformation as a result of information and communication technology (ICT) and thus they have an impact on every element of life (Igwe & Ewelum, 2016).

Subsequently, ICTs give both students and teachers more opportunities to adopt learning and teaching methods that have significantly improved the education sector, the influences are becoming more and more noticeable at schools,

just as ICTs are revolutionizing service delivery in other sectors such as banking, health services and so on (Juliet, 2015). One of the most important factors in the advancement of the economy and of human wellbeing is education. Education is now a key source of competitive advantage, directly connected to economic growth, and a means for nations to draw in business and investment as the global economic competition heats up. Education also seems to be a major factor in determining lifetime wages. Therefore, many nations view increasing educational attainment as a means of combating poverty and deprivation (Kokkos, 2015).

Adult education is a multipurpose area of study that needs to be strengthened with Information and Communication Technology (ICT) equipment. This is so because adult education touches all aspects of human endeavours that demand the use of technological equipment. Technology according to Burge (1994), Cahoon (1998), Eastmond (1998) and Field (1997), can enhance adult learning because it has the potential to increase flexibility, provide access to expertise, facilitate discussion among learners who cannot meet face to face, reduce feelings of

Corresponding author: Madaki Yusuf Muhammad

✉ ymadakifce@gmail.com

Department of Adult and Non-Formal Education, Federal University of Education, Zaria.

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isolation often experienced by non-traditional learners, increase learner autonomy and promote constructivist and collaborative learning. integration of ICT equipment in adult education will engender positive development in actualizing societal goals and associating with the terrain of computer age (Igwe & Ewelum, 2016).

Concept of information Communication Technology

Information communication technology is a collective term used for the various technologies involved in processing and transmitting information (Mohammed, Hamza & Sulaiman 2014). ICTs are not only just about technologies but more about information transfer and communication, which is often noticed in an educational environment. Information, in the view of Muhammad and Maimota (2022) can take different forms such as text, books, pictures, sound, video and multimedia. It is diverse sets of technological tools and resources used to communicate and to create, disseminate, store and manage information. These technologies include computers, internet, broadcasting technologies such as radio, television and telephone.

ICT encompasses the computer hardware and software, the network and several other devices (video, audio, photography, etc.) that convert information(text) images, sound, motion and so on into digital form (Afangideh & Nwideduh, 2010). Okojie (2007) describes ICT as the collection, storage, processing and communication of information by electronic means which enables large information to be handled quickly and economically.

Singh (2018) views ICT as all kinds of electronic systems used for broadcasting telecommunications and media communications including personal computers, video games, cell phones, internet, electronic payment systems, computer software, etc. It is playing a vital role in the current and future development of society and nations. It has affected all spheres of life having changed many aspects of the way we live. According to Mahmoud and Abbass (2024), some

of the new ICT and digital technologies are as follows:

1. Multimedia personal computers, laptops, notebook
2. Digital cameras
3. LAN and WAN (Local Area Network and Wide Area Network)
4. Worldwide Web
5. Floppies, CDs and DVDs
6. Cell phones
7. E- books/ E-journal/ E-databases
8. Computer-mediated conferences
9. Virtual reality
10. Telecommunication satellites
11. Interactive TV and Radio

Concept of Adult Education

Adult education is an activity with educational purposes that are carried on by people who are engaged in ordinary business of life (Bryson in Oluborode 2007). Adult Education according to Seya (2014) is a transmission process of general, technical or vocational knowledge, as well as values and attitudes which takes place outside the formal education system with a view to remedying early education inadequacies of mature people. Oyebamiji (2012) sees adult education as the provision of instructed learning events for adults earlier terminated or interrupted education within the regular education system. Anyanwu in Alao (2023) posited that adult education affords a pattern of adult development which has in view the needs of the adults not only as individual but also as a member of the community which helps him to function more effectively in that society.

Okenimkpe (2003) came up with three distinct categories of adult education using criteria of content and purpose as follows:

1. Basic (foundation) Adult Education comprising of such provision as literacy and numeracy and post-literacy programmes for general (mass literacy drives) and specific recipient groups e.g. adult education for out- of-school boy/girl child, nomadic groups, migrant fishermen, prisoners, displaced persons and so on.

2. Work-oriented Adult Education made up of component programmes of functional literacy, vocational/skills development programmes and on-the-job training programmes.
3. General Adult Education comprising liberal/leisure education, community development training programmes, social and political enlightenment, health care and home management training programmes.
4. Education and training involve process of communication between providers and learners. With the advent of ICT, there have been improvements in the education sector, particularly in the area of course delivery and management of schools both administratively and in the academic arm. Therefore, a careful look at the above definitions raises a number of timely issues related to the use of ICT in adult education profession. Moreover, an understanding of the benefits and challenges of ICT in adult education may prove to be important for facilitators and learners in adult education in order to contribute meaningfully to national development.

Benefits of ICT in Adult Education

The use of ICT to enhance learning and improvements of students' capacities is an ongoing educational pursuit by educators, especially since the turn of the 21st Century (Soetan & Coker, 2018). Kozma (2005) cited in Igwe & Ewelum, (2016), Nwachukwu (2008) noted that 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. Provide opportunities for individualized and independent forms of study thereby ensuring the effectiveness of group learning procedure.
5. 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.
6. Broaden access to quality educational services for adults at all levels of adult education.
7. Provides adult learners with skills they will need for further education as on ongoing learning process for the rest of their lives
8. Help in producing ICT literate adults who will be useful to themselves and contribute meaningfully to the society in which they belong.
9. Produce adults who are capable of working and participating in the new economies and societies arising from ICT and related development.
10. Help education policy makers in formulating and execution of educational policies which will be inclusive in nature to bridge the gap in education.
11. Widen the range of opportunities for the marginalized and the disadvantaged members in the society by opening access to knowledge.
12. Encourage self-directed learning because adults can engage in personal learning by using their personal computers or internet connection.

Corresponding author: Madaki Yusuf Muhammad

✉ ymadakifce@gmail.com

Department of Adult and Non-Formal Education, Federal University of Education, Zaria.

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13. Help adult learners to have access to tutorial software.
14. Help in improving the effectiveness and efficiency in adult education system in Nigeria as a whole.
15. Enable adult learners use ICT in business transactions and other human endeavors activities that require ICT for their accomplishment and achievement of goals.
16. Give immediate feedback to adult learners which will enable them monitor their own progress.
17. Provide adult learners with fast and productive access to information with no barriers due to time and space.
18. Provide a learning environment that promotes both independent and interdependent activities as well as psychosocial support.
19. Fasten decision making and collaboration across distances.
20. Empower adults to continuously adapt to community, national and global developmental challenges thus enhancing lifelong learning.

Mahmud and Abbass (2024) opine that the use of ICT in adult literacy classroom changes the way students learn; they are no longer confined to the physical blocks of classroom, rather, they simulate to distant places and learn their events, geography and so on through the use of ICT. Information communication technology provides a high degree of user interaction and reliable instruction that can be verified. Furthermore, ICT has improved the quality of life for citizens especially adults such as in health, education, politics, social life and so on. Andrew and Ojo (2018) posited that for adults not to be left out in what is happening in the world, they need to key into the use and application of this technology and this can only be achieved through the integration of ICT into adult education in Nigeria.

Challenges of ICT in Adult Education

While the use of ICT for teaching and learning in adult education has great potentials, it

also faces various challenges. Some of the challenges are related to the facilitators, some related to adult learners, some related to centers and lastly some are related to administrators with respect to policy making, financing and widespread application.

Igwe and Ewelum, (2016) argue that the integration of policy, planning, infrastructure, learning content and language, capacity-building and financing are some of the challenges facing the use of ICT in adult education.

Infrastructure limitation which is evident in lack of access to reliable power supply, internet connectivity and electricity fluctuations. Not much can be achieved without constant electricity and internet access to online resources. Digital knowledge divide between younger and older adults where younger generation can manipulate technological and navigate through online resources while older ones especially in remote communities often lack familiarity with ICT tools (Andrew & Ojo, 2018).

Financial constraint is also a major challenge faced by majority of adult learners who are unable to procure ICT resources for their learning. Thus, many times the learners have to pay the fees by themselves (Baharudin, Murad, & Mat, 2013). Inadequate funding, affordability of ICT infrastructure and devices, lack of logistics for monitoring and evaluation; low level of political commitment are also hindrances to widespread adoption of information communication technology in Adult Education (Sakir, Kalli & Ebireri, 2017).

CONCLUSION

In conclusion, our study highlights the benefits and challenge of ICT in adult education which include opportunities for more adult-learner-centred teaching, equipping the adult educator with new sources of information and knowledge, participation in economy related development, encourage self-directed learning, and among others as presented earlier in the paper. Moreover, the paper highlighted some challenges with regards of ICT in adult education in such a way that these challenges are facilitators related, some learners related and other related to adult



learning centers. If ICT is properly designed and implemented in Nigeria, it can go a long way in facilitating the acquisition of knowledge and skills that will promote the objectives of Adult Education in Nigeria.

RECOMMENDATIONS

1. Proper attention should be given to adult education by the three tiers of government in line with the global concern for eradication of illiteracy (Onyenemezu, 2012).
2. Government should erect Smart Classes in the literacy centers for easy access to ICT resources by the adult facilitators and learners.
3. Administrators should mobilize resources and manpower for inclusion of ICT in Non-Formal Education programmes (Hussain, 2013).
4. Reliable technical support should be given to adult facilitators in the use and application of information communication technologies via training and retraining.

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Corresponding author: Madaki Yusuf Muhammad

✉ ymadakifce@gmail.com

Department of Adult and Non-Formal Education, Federal University of Education, Zaria.

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