

# UTILIZATION OF INFORMATION COMMUNICATION TECHNOLOGY IN PROMOTING LIFELONG LEARNING OPPORTUNITIES AMONG POST-BASIC LITERACY ADULT LEARNERS

USMAN Musa

Department of Continuing Education and Community Development  
Ibrahim Badamasi Babangida University Lapai

[m.achitukpa@gmail.com](mailto:m.achitukpa@gmail.com)

08160976846/08152421290

## Abstract

*This paper explores how Information Communication Technology (ICT) can be effectively utilize in facilitating lifelong learning opportunities for post-literacy adult learners. It examines the challenges faced by post-literacy adult learners and discusses how ICT can bridge these gaps by providing accessible, engaging, and relevant learning resources. The paper reviews existing literature on ICT integration in adult education, lifelong opportunities for post basic literacy learners and prospect of ICT in adult education, the paper further made recommendations on how ICT can be integrated in adult education in order to enhance and provide opportunities for post basic literacy adult learners.*

**Keywords:** Lifelong learning, Post basic literacy, Adult learners.

## Introduction

Lifelong learning is increasingly recognized as crucial for individual and societal progress in the rapidly evolving 21st century. The rapid pace of technological advancement and globalization necessitates continuous skill development and adaptation. Lifelong learning empowers individuals to adapt to changing job markets, maintain professional relevance, and pursue new career paths (OECD, 2019). Furthermore, it enables individuals to participate actively in civic life, contribute to informed decision-making, and build more resilient communities. The benefits extend beyond economic and civic engagement, contributing to improved overall well-being, enhanced cognitive function, and increased social connectedness throughout life.

Lifelong learning is the continuous, voluntary, and self-motivated pursuit of knowledge for personal or professional development (European Commission, 2019). It includes formal, non-formal, and informal learning experiences that occur throughout an individual's life. Lifelong learning helps individuals adapt to changes in society, remain competitive in the job market, and enhance personal growth.

Lifelong learning opportunities remains unevenly distributed, particularly for post-literacy adult learners. These individuals, having acquired basic literacy skills, often face significant barriers that hinder continued education and personal development. The barriers include limited access to formal education institutions and programs, lack of time

and financial resources due to work and family responsibilities, geographical isolation that restricts access to learning centers and internet connectivity, and a scarcity of culturally relevant and engaging learning materials tailored to their specific needs and interests (UNESCO Institute for Lifelong Learning, 2020). Overcoming these barriers is essential to ensure equitable access to lifelong learning and to unlock the full potential of all members of society.

### **Conceptual framework**

Information Communication Technology (ICT), encompasses a range of technologies like computers, mobile phones, the internet, and multimedia resources, has the potential to democratize access to learning by providing flexible, personalized, and engaging learning experiences (UNESCO, 2012). ICT skills is particularly relevant for post-literacy adult learners who often face barriers of time, location, and resources. ICT can deliver learning materials at their own pace, in their preferred formats, and at convenient times, breaking down traditional constraints of formal education. Furthermore, it facilitates access to a wider range of educational resources and collaborative learning opportunities that would otherwise be unavailable (Ally, 2019).

Information Communication Technology (ICT) refers to various digital tools and systems used to process, store, and share information (UNESCO, 2018). It encompasses computers, the internet, mobile devices, software applications, and multimedia resources that facilitate communication and learning. In education, ICT enhances teaching methodologies, provides access to online learning materials, and fosters collaborative learning experiences.

### **Post- Basic Literacy**

Post-Basic Literacy refers to the stage where individuals have acquired basic literacy skills but require further learning to consolidate and expand their knowledge and competencies. The learners often come from marginalized backgrounds with limited access to educational resources. They might have completed primary education or participated in adult literacy programs, but their skills may not be sufficient to meet the demands of a modern, knowledge-based society.

Post-basic literacy encompasses the crucial phase following the acquisition of fundamental literacy skills, where individuals require continued learning and development to solidify and broaden their knowledge base and practical competencies. This stage is critical for enabling individuals to fully participate in and contribute to society, post-literacy learners hail from marginalized communities and face significant barriers, including limited access to quality educational resources, systemic inequalities, and socio-economic constraints. While they may have completed primary education or participated in adult literacy initiatives, the skills acquired may be insufficient to navigate the complexities and demands of a modern, knowledge-based society. Specifically, their reading, writing, numeracy, and digital literacy skills might not be adequate for securing gainful employment, accessing essential services, engaging in informed civic participation, or pursuing further educational opportunities. Therefore, post-literacy programs aim to bridge this gap by providing targeted and contextually relevant learning opportunities that build upon existing skills and equip individuals with the tools necessary for lifelong learning and socio-economic advancement (UNESCO, 2017).

## Lifelong Learning Opportunities for Post Basic Literacy Learners in Adult Education

Lifelong learning opportunities encompass a broad spectrum of educational avenues accessible to individuals exceeding their foundational literacy education (Merriam & Bierema, 2014). These opportunities are particularly relevant for post-basic literacy adult learners, defined as those who have completed basic literacy programs and now seek to expand their knowledge and skills further (UNESCO Institute for Lifelong Learning, 2016). These opportunities manifest in - various forms which include:

- a) **Vocational training programs:** These programs are specifically designed to equip learners with the practical, hands-on job skills required for success in particular occupations or industries (Cedefop, 2018). They often involve apprenticeships, internships, and simulations to provide real-world experience. The focus is on immediate employability and meeting the demands of the labor market.
- b) **Online courses:** Online courses offer flexible and self-paced learning experiences, enabling individuals to pursue education and training at their own convenience and from any location with internet access (Allen & Seaman, 2017). These courses utilize a variety of digital technologies, such as video lectures, interactive simulations, and online discussion forums, to deliver educational content and facilitate collaboration among learners.
- c) **Professional development programs:** These programs are strategically aimed at enhancing workplace competence and

improving employee performance within organizations (Noe, Clarke, & Klein, 2014). They may cover a wide range of topics, including leadership skills, communication skills, technical skills, and industry-specific knowledge. Professional development can take the form of workshops, seminars, conferences, mentoring, and coaching.

- d) **Community-based education initiatives:** These initiatives are tailored to address the unique needs and interests of local communities (Smith, 2012). They often provide educational opportunities for underserved populations, promote civic engagement, and foster community development. Examples include literacy programs, GED preparation courses, cultural arts programs, and workshops on topics such as health and wellness, financial literacy, and parenting skills. These initiatives are often delivered through local organizations, libraries, community centers, and schools.

Information and Communication Technology (ICT) plays a pivotal role in enabling and expanding lifelong learning. ICT provides flexible access to educational resources, allowing learners to engage with materials at their own pace and convenience (Ally, 2004). Furthermore, ICT offers diverse learning materials and platforms, catering to different learning styles and preferences, making education more accessible and engaging (Holmes, Tangney, Fitzgibbon, Savage, & Mehan, 2001).

## Role of ICT in promoting lifelong learning

- a. **Accessibility:** Information and Communication Technologies (ICTs), particularly mobile phones and internet-enabled devices, significantly expand access to education, reaching learners in remote and underserved areas. These technologies transcend geographical limitations and temporal constraints by providing learning materials anytime and anywhere, enabling flexible learning schedules. This is especially critical for learners who face barriers related to location, time commitments, or physical disabilities, allowing for more equitable access to educational opportunities (West, 2012). Furthermore, advancements in mobile learning are increasingly being leveraged to support education in crisis-affected areas, offering learning continuity when traditional schooling is disrupted (UNESCO, 2023).
- b. **Personalized Learning:** ICT-based learning platforms facilitate customized learning experiences by offering tailored learning paths that cater to individual learning styles, preferences, and paces. Adaptive learning technologies play a crucial role in this process by assessing learners' prior knowledge, identifying knowledge gaps, and dynamically adjusting the content and difficulty level to match their individual needs. This adaptive approach ensures that learners receive targeted support and guidance, optimizing their learning outcomes and promoting self-directed learning (Hwang, 2014).
- c. **Engagement and Motivation:** Multimedia resources, interactive simulations, and gamified learning experiences offered through ICTs can significantly enhance learner engagement and motivation. By incorporating elements of play, competition, and reward, these approaches transform learning from a potentially passive activity into an active and enjoyable endeavor. Interactive simulations and virtual reality environments can provide immersive learning experiences that bring abstract concepts to life, while multimedia resources, such as videos and animations, can cater to different learning preferences and enhance understanding. Such approaches foster a positive learning environment, encouraging active participation and intrinsic motivation (Prensky, 2001).
- d. **Skill Development:** ICTs provide access to a vast array of online courses, tutorials, and resources that support the development of a wide range of skills essential for success in the 21st century. These resources encompass various domains, including digital literacy, vocational skills, entrepreneurial skills, and higher-level academic subjects. Learners can acquire new skills, update their knowledge, and enhance their professional capabilities through self-paced online learning platforms, open educational resources, and virtual training programs, contributing to lifelong learning and workforce readiness.
- e. **Community Building:** Online forums, social media groups, and collaborative learning platforms enable learners to connect with peers, mentors, and experts from diverse backgrounds, fostering a sense of community and shared learning. These online spaces facilitate knowledge sharing, collaborative problem-solving,

- and peer support, allowing learners to learn from each other's experiences and perspectives. Online communities can also provide valuable networking opportunities, connecting learners with potential employers and collaborators, and fostering a sense of belonging and social connection within the learning environment. These collaborative spaces are particularly valuable for learners in isolated or underserved communities, providing access to a broader network of support and expertise.
- f. **Interactive and Engaging Learning** ICT tools significantly enhance interactive and engaging learning experiences, fostering a deeper understanding and promoting lifelong learning habits. By leveraging simulations, virtual reality, and gamified learning platforms, educators can create immersive environments that actively involve learners in the subject matter (Zounek et al., 2020). This active participation cultivates critical thinking, problem-solving skills, and a genuine interest in acquiring new knowledge, thus laying the foundation for a continuous pursuit of learning beyond formal education (Laurillard, 2020).
  - g. **Collaboration and Communication** ICT fosters lifelong learning by enhancing collaboration and communication. Digital tools enable learners to connect with peers, experts, and resources beyond traditional classroom settings, fostering a collaborative learning environment. Online platforms facilitate discussions, group projects, and knowledge sharing, allowing individuals to learn from diverse perspectives and experiences. Moreover, ICT provides various communication channels, such as video conferencing, instant messaging, and email, enabling learners to communicate effectively with instructors and peers, receive timely feedback, and participate in virtual communities of practice. This constant interaction and exchange of ideas promote continuous learning and personal growth, crucial aspects of lifelong learning (Alaali & Awad, 2021).
  - h. **Lifelong Skill Development** ICT plays a pivotal role in promoting lifelong skill development by providing accessible and flexible learning opportunities beyond traditional educational settings. Digital platforms, online courses, and interactive resources empower individuals to acquire new skills, update existing knowledge, and adapt to rapidly changing job market demands. This continuous learning, facilitated by ICT, ensures individuals remain competitive and engaged throughout their careers. Recent research underscores the importance of ICT-enabled lifelong learning, with studies highlighting its potential to bridge skill gaps and improve employability in the digital age (Vuorikari et al., 2020). Furthermore, ICT tools such as virtual reality and augmented reality are increasingly utilized to deliver immersive and engaging learning experiences, fostering deeper understanding and retention of new skills (Radianti et al., 2020).

## Conclusion

ICT holds immense potentials to transform lifelong learning



opportunities for post-literacy adult learners. By addressing the challenges of the digital divide, promoting digital literacy, and developing relevant learning content, ICT can empower these individuals to acquire new skills, enhance their knowledge, and improve their quality of life. A strategic and collaborative approach, involving governments, NGOs, educators, and the private sector, is essential to realize the full potential of ICT in bridging the gap in access to lifelong learning and fostering a more inclusive and equitable society.

### Recommendations

1. Governments and educational institutions should invest in ICT infrastructure to support lifelong learning initiatives.
2. Training programs should be developed to equip adult learners with digital literacy skills.
3. Policies should promote inclusive access to ICT resources for disadvantaged and rural communities.
4. Educators should adopt innovative teaching strategies that integrate ICT into adult education programs.

### References:

- Allen, I. E., & Seaman, J. (2017). Digital learning compass: Distance education enrollment report 2017. Babson Survey Research Group.
- Ally, M. (2004). Foundations of educational theory for online learning. In T. Anderson & F. Elloumi (Eds.), *Theory and practice of online learning* (pp. 3-31). Athabasca University.
- Ally, M. (2019). *Foundations of Educational Theory for Online Learning* (2nd ed.). AU Press, Athabasca University.
- Cedefop. (2018). *Vocational education and training in Europe: Priorities and challenges*. Publications Office of the European Union.
- Hwang, G. J. (2014). Definition, framework and research issues of smart learning and applications. *Smart Learning Environments*, 1(1), 1-14.
- Merriam, S. B., & Bierema, L. L. (2014). *Adult learning: Linking theory and practice*. Jossey-Bass.
- Noe, R. A., Clarke, A. D., & Klein, H. J. (2014). *Employee training and development* (6th ed.). McGraw-Hill.
- OECD. (2019). *Getting Skills Right: Assessing and Anticipating Changing Skill Needs*. OECD Skills Studies, OECD Publishing, Paris.
- Smith, M. K. (2012). Community education. *The Encyclopedia of Informal Education*. Retrieved from [Infed Website] (Replace with the actual Infed website address)
- UNESCO Institute for Lifelong Learning. (2016). *Leaving no one behind: Thematic study of adult learning and education from a lifelong learning perspective*. UIL.
- UNESCO. (2012). *Transforming education: The power of ICT policies*. UNESCO Publishing.
- UNESCO. (2017). *Education for Sustainable Development Goals*.

- Learning Objectives. UNESCO Publishing.
- UNESCO. (2018). ICT in education: A global perspective. United Nations Educational, Scientific and Cultural Organization.
- UNESCO. (2023). Mobile Learning Week 2023 concept note: Technology for quality education for all. UNESCO.
- West, M. (2012). Turning on mobile learning: Global themes. UNESCO.
- European Commission. (2019). Key competences for lifelong learning. Publications Office of the European Union.
- UNESCO Institute for Lifelong Learning. (2020). Embracing a culture of Lifelong Learning. <https://uil.unesco.org/>
- UNESCO Institute for Lifelong Learning. (2016). Leaving no one behind: Literacy, sustainable development and peace. Hamburg: UNESCO.
- Holmes, B., Tangney, B., Fitzgibbon, A., Savage, T., & Mehan, S. (2001). Enhancing learning and teaching through ICT: A revised pedagogical framework. Higher Education Academy.
- Prensky, M. (2001). Digital natives, digital immigrants part 1. On the horizon, 9(5), 1-6.
- Laurillard, D. (2020). Designing Technology-Enhanced Learning: Setting the Scene. In L. Gómez Chova, A. López Martínez, I. Candel Torres (Eds.), EDULEARN20 Proceedings (pp. 7991-7999). IATED.
- Zounek, A., Sudzina, M., & Strielkowski, W. (2020). Gamified E-learning: Increasing Students' Engagement with ICT Tools. Proceedings of the 14th International Technology, Education and Development Conference, Valencia, Spain.
- Alaali, S., & Awad, M. (2021). The impact of ICT on lifelong learning: A review study. International Journal of Emerging Technologies in Learning (iJET), 16(20), 16-28.
- Radianti, J., Majchrzak, T. A., Fromm, J., & Wohlgenannt, I. (2020). A systematic review of immersive virtual reality applications for higher education: Design elements, lessons learned, and research perspectives. Virtual Reality, 24(1), 25-54.
- Vuorikari, R., Ferrari, A., & Punie, Y. (2020). DigComp 2.1: The Digital Competence Framework for Citizens with eight proficiency levels and examples of use. Publications of the European Union.