

THE ROLE OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) IN TEACHING ADULT EDUCATION STUDENTS IN SOKOTO STATE: COUNSELLING INTERVENTION

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Abstract

Information and communication technology (ICT) is an umbrella term that includes any communication device encompassing radio, television, cellular phones, computers and network hardware and software, satellite system as well as various services associated with them which include projectors and video conferencing and distance learning. The paper focus on the role of Information and communication technology (ICT) in teaching adult education students in Sokoto state: counselling interventions. It discusses the concept and types of Information and communication technology (ICT), concept of adult education, problems and some possible solutions to the problems of Information and communication technology (ICT) in teaching adult education students in Sokoto state, roles of Information and communication technology (ICT) in teaching adult education students in Sokoto state. Conclusion as well as some suggestions toward improving adult education in Sokoto state were stated such as comprehensive welfare packages should be provided for adult education workers and learners so as to boost their commitment and participation, Instructional and communication method used in formal education setting should be used in adult education for sustainable development and well being of the Nigerian adult.

Therefore adult education is a crucial factor in the development and well being of adults in Nigeria and the development of the country in general. Economist is of the view that participation in adult education is an investment in the human and capital assets. Also benefits from investment in adult education go to both individual and community. Therefore adult education will helps in development of the nation. There are so many pandemics and undermine the development and progress of adult education for the sustainable development of the country.

The illiteracy rate in Nigeria is still very high. This, therefore, calls for a good reason to encourage literacy among the masses especially among the relative young people who could otherwise form an important resource for national development. The need for adult education programmes can be understood, for a country like Nigeria with population of about 140 million, over 300 ethnic groups as well as varied religious affinities, therefore no meaningful development can be achieved without their active participation in national development programmes, which can only be achieved if the masses are educated. Adult education simply means an activity for adult that involves learning. This activity is usually planned to achieve some goals such as knowledge about a specific topic, develop a particular skill or achieve a particular status or attain personal satisfaction by accomplishing a task.

Concept of Information and Communication Technology (ICT)

Information according to Hawkin (1995) refers to the giving of knowledge or news information is the message, learning and awareness created as a result of interaction between parties who share a common language. The purpose of information is to cause a change in the intellectual, emotional physical and skill status of the beneficiaries. Communication is the passing of information among persons. Communication cannot a process of sharing of message, ideas and feeling among persons (Eza & Obeta, 2006). Purpose of communication is to establish a means and modes of interaction within a society which share a common language. Technology is the application of scientific principles, skills, devices, tools and systems in the solution if human problems (Eze & Obeta, 2006). Technology connotes the bleeding science and art to produce devices and principles for achieving stated objective in the course of improving biological, environmental, economic and educational status of man, woman and the youths.

Information and communication Technology, ICT then connotes the designed production application and evaluation of means, modes and devices for disseminating, managing and storing information about the principle and methods of solving human (Biological, Environmental, Economic and Educational) problems. Here, it can be seen that this concept embraces both the scientific principles and artistic ingenuity put into the design, production, application and management of the ICT tools. ICT is of course applicable to all aspects of human endeavor for as long as there are problems to be

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solved and the need to upgrade or improve principle, method and device applied in the aspect of human communication.

Information and communication technology facilities are the computing and communication facilities and features that vigorously support teaching, learning and a range of activities in education. Information and communication technology (ICT) has the potential to enhance access quality and effectiveness in education in general and to enable the development of more and better teachers in Nigeria in particular. Information and Communication Technology includes the full range of compute hardware's computer software's and communication facilities.

Information and communication technology (ICT) has become, within in every short time one of the basic building blocks of modern society. Many countries now regards understanding ICT and mastering the basic skills and concepts of ICT as part of the core of education alongside reading, writing and numeracy. Grace (2003) viewed information and communication as an umbrella, term that includes any communication device or application, encompassing, radio television, cellular phone, computer and network, hardware and software, satellite systems and soon, as well as the various services and applications, associated with them such as video conferencing and distance learning.

Similarly, Austin (2008) opines that ICT is comprised of computers, networks, satellite communication, nobilities, video text cables, television, electronic mail (E-mail) electronic games and automated office equipment. The information industry consists of all computers, communications, and electronics related organizations, including hardware, soft ware, and services. In addition in 2004 America Association on Information Technology (AAIT) described information technology as the capability to electronically input process store output that transmit, receive data and information including: text, graphics, sound and video as well as the ability to control machines of all kinds of electronically. ICT refers to the generalized technologies involved in information. It includes the radio video, computers, sensors, mail and so on which are used in education for teaching and Learning (Grace, 2003). It constitutes of facilities that could be used to complement teaching and learning. It also promotes the development of information technology (ICT) in the context of using ICT as a learning tool for the overall improvement of education.

Information communication technology (ICT) is the process and maintenance of information and all forms of computer, communication network and the mobile technology to mediate information communication technologies include all media employed in transmitting audio, video, data or multimedia such as cable satellite, Fibre optics, wireless (Radio Infrared, Bluetooth, wikifidia). Network (CAN) technology

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include personal area network (PAN) intranets, extranets, LANs, WANs, MANs and the internet computer technologies include all removable media such as optical disc, disc, flash memories, video books, multimedia projector. Interactive electronic boards and continuously emerging state of the art PCs. Mobile technologies comprise mobile phones, PDA palm tops etc. these technologies have information as their material object. Information is not reserved for use in isolation but, rather communication among users.

ICT is a collective term for computer, software, networks, satellites link related systems that allow people to access, analyze, create, exchange and use data, information and knowledge in ways that until recently were almost unimaginable (Beebe, 2004). Information communication technology (ICT) is the processing and maintenance of information, and the use of all forms of computers, communication network and mobile technologies to mediate information. Communication technologies include all employed in transmitting audio, video, data or multimedia such as cable, satellite, fiber optics wireless (Radio, infrared, Bluetooth, wikifidia) network technology personal area network (PAN), campus area network CAN, internet extranets, LANs, MANs, and the internet computer technologies include all removable media such as optical disc, disk, flash removable, video books, and multimedia projectors, Interactive electronic and continuous emerging state of the art PCs.

Mobile technologies comprises mobile phones, PDA, Palmtops, etc these technologies have information as there material object. Information is not received for use in isolation but rather communicated among users. ICT applied to education enhances the delivery and access to knowledge and improves the curriculum. It produces richer learning outcomes compared with education without ICT. It encourages critical thinking and offers unlimited means of achieving education goals (Iloanusi and Osuagwu, 2009). Looking at the above concept one can therefore conclude that Ict implies the use of any electronic device that emits images or sound in teaching and learning process with sole aim of making learning and teaching easier.

Types of Information and Communication Technology

There are different types of ICT depending on the authors and area of application of ICT related gadget for example, according to Tinio, (2002) Ict has the following types.

Active learning:- learning (student) learn as they do and wherever appropriate work on real life problems in-depth making learning less abstract and more relevant to the learners life situation. In this way and in contrast to memorization or role learning, ICT enhances learning and promotes increased learner engagement. The learner can choose what to learn and when to learn it.

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Collaborative learning:- there is cooperation among students , teachers and experts regardless of individual differences and class. Apart from real world interaction ICT v supported learning provides learner's the opportunity to work with people from different cultures, thereby helping to enhance learners teaming and communicative skill as well as their global awareness.

Creative learning:- ICT supported learning promotes the manipulation of existing information and the creation of real world products rather than the regulation of received information. Men, women and youth education is best nourished in a creative setting where learners are encouraged to innovated and invent ideas and concept as well as utility programmes.

Integrative learning:- integrative learning is an approach that facilitates the mitotic, interactive and holistic approach to teaching and learning. It eliminates the artificial separation between the different disciplines and between theory and practice that characterize the traditional setting.

Evaluating learning:- learning in this setting is diagnostic since the setting is for learners, so the learner is capable of discovering his/her strengths and weaknesses and allowing him/her to choose between alternative approaches to solution to learning problems.

E-learning:- Although most commonly associated with higher education and cooperate training, e-learning encompasses learning at all levels, both formal and non-formal, that use an information network, the internet (LAN) or extranet (WAN) whether wholly or in part for delivery, interaction and for facilitation. The term include online learning web based learning which is a subject of e-learning and refers to learning using an internet browser such as nets cape navigator or internet explorer (Tinio, 2002).

Blended learning:- Another term that is gaining currency is blended learning. This refers to learning models that combine traditional classroom practice with e-learning solutions (Tinio, 2002) for example, students in a traditional class can be assigned both print based and online based materials, have online mentoring session with their teacher through chat, and can subscribe to a class email list. Or a web based training course can be enhanced by periodic face to face instruction. Blending was prompted by the recognition that not all learning is best achieved in an electrically mediated environment particularly one that dispense with a live instructor altogether. Instead, consideration must be given to the subject matter, the learning objectives and outcomes, the characteristics to the learners and the learning context in order to arrive at the optimum mix of instructional and delivery methods.

Open and distance learning:- open and distance learning is defined by the commonwealth of learning as a way of providing learning opportunities that are characterized by the separation of teacher and learner in time or space or both time and space, learning that is certified in some ways by an institution or agency, the use of a variety of media, including print and electronic; two way communication that allows learners and authors to interact.

The Concept of Adult Education

Adult education is regarded as any education given to adult persons, men and women or what make it possible for them to learn to read and write. It offers adults who are denied the facilities of exposure to formal education an opportunity to go back and provide for themselves. Anyanwu (1987) sees adult education as that which enables people to be aware of both individual and community needs and provides the types of learning that enables recipients to cope successfully with current problems. In the adult education classes especially in the literacy class level, the adult person is taught the basic skills of reading, writing and numeracy. The skill of reading and writing is, therefore, the most basic and most believed that without literacy, people cannot learn the useful information needed for survival and happiness throughout life. There is no upper age limit in adult education. In this country the target age-group for adult education classes should be between 15 years to 45 years old, but at times people older than 45 do attend the literacy class.

Adult education is the practice of teaching and educating adults. This often happens in the work place, through extension or continuing education, courses at secondary school, at a college or university. The practice is also often referred to as training and development. According to Lindeman (1926) Education is life not a mere preparation for an unknown kind of future living. The whole life is learning, therefore, education can have no ending. This new venture is called adult education not because it is confined to adults but because adult hood, maturity defined it's limit. While to Merriam & brockett, (1997) define adult education as activities intentionally designed for the purpose of bringing about learning whose age, social roles, self perception define them as adult. However, these adults are seeking information, knowledge and skills about their current social role and status. They may participate in learning activities at any of the variety of government and nongovernmental institutions to acquire some skills that will enable them to actively and financially contribute in their rural development project without reliance on any external assistance.

Verner (1962) defined adult education as the action of an external educational agent in purposely ordering behavior into planned systematic experiences that can result in learning for those such an activity is supplemental to their primary roles in their society and which involve some continuity in an exchange relationship between the agent and

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the learner so that the educational process is under constant supervision and direction. Educating adults differ from educating children in several ways. One of the most important differences is that adults have accumulated knowledge and experiences that can add to or hinder the learning experience. Another difference is that most adult education is voluntary; therefore, the participants are generally better motivated. From the forgoing discussion, adult education may simply be described as any flexible organized learning experience provided outside the formal school system which has been purposely designed to meet specific learning need of the adult.

Adult education is more of promoting changes, as well as assisting the adult population to control both change and environment in which the changes occur. In this respect, there is need to educate the adult and to enable them to acquire the skills, knowledge and consciousness that will enable them to think more clearly on how to improve their human relations to facilitate their participation in measures designed to promote their welfare, and to expedite their personal community growth. Since the learners in the post-literacy programmes brought themselves to classes, there is every tendency that they will exhibit a sense of purpose and commitment to whatever they are being taught. From experience, in some of the classes they are found to be most motivated. They know that they are voluntarily subjecting themselves to the post-literacy programmes; they must have developed a specific need and thirst to be literate. There is every tendency that they will attend their duty with a meticulous sense of purpose and dedication. As a result, they are bound to learn better and probably faster. It is assumed that because of their age and experience in life, they will tend to grasp the meaning and relevance of subject matter quickly. The adult learner is anyone who takes part in any form of adult education activity; adult education could be examined in terms of such relevant development categories as: physical, intellectual, personality, family and career.

Problems of ICT in Teaching Adult-Education Programme in Sokoto State

The following are some of the problems of ICT in teaching adult education students in Sokoto state:-

Education policy and planning:- In terms of policy and planning, most developing countries including Nigeria need to look at the extent their school curricular are ICT adaptable and assess the need to shift their programs in order to tap the resources offered by the ICT parading. The developing countries should also assess the status of their teachers in terms of training and retention, which are the functions of motivation, funding and living wage.

Infrastructure:- Basic infrastructure such as electric power appropriate school building and telephone lines requiring that all schools have at least one line, most classroom blocks are still the very old and semi open structure of the old. Classroom intended for ICT use should be fully walled, ventilated and air conditioned in the tropics as in

Nigeria. Computers are yet to be affordable by the average Nigerian teacher and students are not expected to own computers and television sets.

Language and Content:- The language of the Nigerian people include English which is the main official language software meant for Nigeria consume are adequately available. The content of the ICT programs are predominantly alien to the Nigerian culture and do not consider local language of Nigerian cultures there is need for software that would facilitate the teaching and learning of Nigerian culture, arts and technology.

Inadequate Skilled Manpower:- To manage the available systems and inadequate training facilities for ICT education at the secondary and tertiary level.

Non Availability of ICT Instruction Materials: in Nigerian secondary schools Yusuf, (2005) in his investigation on teachers self-efficiency in implementation of computer education found out that most teachers in school do not have the needed experience and competence in the use of computer either for educational or industrial purpose as majority of male and female teachers are affected professionally, teacher need to be adequately prepared to implement a state of the art ICT curriculum.

Inadequate Social Infrastructure: is listed as another limitation when using the web. Social interaction is not only important to develop social skills of the students but also because studies show that learning in small groups is often more effective than learning alone in both traditional and computer environment.

The level of ICT awareness of the people: as well as the government can be considered as very low: this makes the level of commitment on the side of government very low thereby affects the provision of basic ICT tools.

High cost of consumers: the cost of consumers of ICT services is quite expensive. Staff, students and researchers visit campus business cyber cafés to use the internet. In these café the average cost of browsing is N100 per hour. As a result of the high cost, students and staff browse only where absolutely necessary.

High cost of ownership: there is realization in Nigeria that the government alone cannot adequately shoulder the high cost of quality education in the 21st century.

Cost: the price of computer hardware and software continued to decrease in most developed countries, but in developing countries such as Nigeria the cost of computers is more expensive. However the cost to consumers of ICT services is quite expensive.

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Lack of competency and skills status: Nigeria does not only lack information infrastructure, it also lacks the human skills knowledge and competence to fully integrate ICT in education sector, Thus affecting the quality of teaching and learning in institutions at both levels (Samuel & Ede, 2005).

Role of ICT in Teaching Adult Education Students in Sokoto State

ICT in particular comprises of two technologies put together. These are information technology (IT) and communication technology (CT) the former is more computer and its peripheral devices such as satellites, telephone, radio and cable networks etc. the use of computer enables us to process information and perform specific tasks quicker than we could do ourselves. ICT systems are very flexible and can be made to perform a variety of different tasks. ICT networks (e.g internet) allow us to distribute and share information quickly, and over a very long distance. Many developments in IT are designed to make our lives easier, but people's expectations of what they do (to others) can achieve are often leading to unrealistic demands being placed on people and the technology around them.

Internet is a fast and very reliable feedback mechanism, which is not judgmental and impartial, thereby encouraging the student to make their own conjectures and to test and modify their ideas by: Engaging the interest of the students as well as increasing independence and personal responsibility for education, Motivation by using entertainment to learn, Increasing the confidence of students as well as using computers and mastering of subject matter being taught, It also individualize learning by allowing students to learn at their own pace. Different programme are designed in order to solve questions in education.

ICT appeared to educate and enhance the delivery and access to knowledge and improve the curriculum. It produces richer learning outcome compared to education without ICT. It encourages critical thinking and offers unlimited means of achieving educational goals, they are the merging, applying, infusing and transforming approaches that constitute ICT optimization stage in education (UNESCO 2002). There are numerous uses of ICT in Quality teaching and learning in Nigeria. First, computer can enhance efficiency and effectiveness. The quality in teaching various subjects/courses could be improved. For instance, many teaching/lectures are already teaching large classes of students. In this situation, students no longer receive the much desired individual assistance. Also, computer can enhance problem solving skills of the learners by focusing on thinking skills especially in science, vocational and technical disciplines and so on (Samuel and Ede 2005).

Computer can be used for educational research such as the use of internet to get resent articles and publications from various sources around the world, sharing of views

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or exchange of ideas through collaboration and partnership, computer can change pedagogical practices in teaching, which depended heavily on the traditional lecture method. It is universally accepted that computers allow more independent exploration. Therefore change from information dispenser to that of information manager, from authoritative source of information to a guide of self propelled exploration (Smith 1989). Computer will offer the Nigerian Teacher Improvement in the techniques of research. The cumbersome exercise of searching hard through the library's card catalog or periodical indexes can be made easier by typing few key words pertinent to the research topic into a computer and the research can receive extensive list of related sources of articles in books and journals in just a matter of minutes through scholarly articles available via different types of search engines on the internet (Samuel and Ede 2005).

The importance of ICT is quite evident from education perspective. Though the chalk board, textbooks, radio, television and film have been used for educational purpose over the years, none has quite impacted on the audio-visual faculties of users; the computer is capable of activating the senses of sight, hearing and thought. ICT has the capability to provide higher interactive potentials for user to develop their individual, intellectual and creative abilities. The main purpose of ICT "consists just in the development of human mortal researches, which allow people to both successfully apply the existing knowledge and produce new knowledge" (Shavinina, 2001). The use of computers and the internet is still in its infancy in developing countries, if these are used at all, due to limited infrastructure and the attendant high cost of access.

Conclusion

Conclusion drawn from the discussion so far, it is confirms that ICT plays significant importance in the teaching and learning process not only in the formal education programme but also in the adult education programme as it engages the interest of the students as well as increases independence and personal responsibility for education, Motivation by using entertainment to learn, Increasing the confidence of students as well as using computers and mastering of subject matter being taught.

Suggestions

Based on the discussion so far made the following suggestions were put forward toward improving adult education in Sokoto state:-

1. Comprehensive welfare packages should be provided for adult education workers and learners so as to boost their commitment and participation, Instructional and communication method used in formal education setting should be used in adult education for sustainable development and well being of the Nigerian adult.
2. National commission for mass education as the central body that coordinates the activities of adult and mass education should be strengthened in all its activities and

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government should adequately fund the commission for mass literacy, adult and non-formal education for conducting research and related matters in adult education which will adequately help in the development and well being of adults in Nigeria.

References

- Anyanwu, C.N. (1987). *Developing Adult education in Nigeria*. Ibadan: University press ltd.
- Austin, J. L. (2005). *Importance of information and communication technology in education*, Information technology association of America, Debbie Hughes, USA.
- Beebe, M. O. (2004). *Impact of ICT revolution on the academic landscape*, CODESRIA Conference on election publishing and dissemination, Dakar Senegal.
- Eze, A. E. & Obeta, A. N. (2006). *Educational technology, theory and practice*, Nsukka: chukka Educational publishers.
- Grace, A. A. (2003). The development of ICT skills through the national computer curriculum for secondary school. *STAN conference proceeding*, 6, 263-266.
- Illoanusi, N. O. & Osuagwu, C. C. (2009). ICT education achievement so far in Nigeria. In a Mender-vilas, A Solana martin J. A. mesa vizalez and J. mema gonizalez (eds) *Research Reflections and innovations in integrating ICT in education, Badojoz, formation*, 1331-1335.
- Keegani, D. (2000). The comm. Weath of learning, *an introduction to distance learning*, Retrieved From <http://www.col.org/resources> publications.
- Lindeman, E. (1926). *The meaning of adult education*: New York new Republic, 6
- Merriam, S. & Brockett, R. (1997). *The profession and practice of adult Education*. Sanfrancisco: jossey Bass.
- Samuel, E. & Ede, S. (2005). Using information and communication technology in secondary School in Nigeria, problems and prospects. *Educational technology and society*, 8(1), 104- 112.
- Verner, C. (1962). *Adult education theory and method: a conceptual Scheme for the Identification and classification of process*, Washington, D.C: Adult education association of The U.S.A.