

INFORMATION COMMUNICATION TECHNOLOGIES (ICT) AS AN ENHANCING TOOL IN QUALITY EDUCATION

Mrs. Shweta Kapse

Assistant Professor, Cloth Market Professional Studies

ABSTRACT

Information and Communication Technology (ICT) are always use for quality education. We can understand this type of education by including such objectives like creating, evaluating, Analyzing, Applying, Understanding and remembering..This paper emphasizes on the quality education of the developing countries. The traditional pattern of teaching includes chalk board teaching, charts or posters, home tuitions, Gurukuls, etc. these are the very old teaching techniques. In spite of all this information and communication tool plays a very important role for our developing country. this ICT tools is very important for Teachers ,parents, students and university itself. ICT is very helpful foreign education field for all the areas of developing countries like villages, some backward areas, and those areas also in women are not permitted to go school or college daily .this paper emphasize on certain very important issues of quality education with the help of this ICT tools applications. With the help of theses education quality definitely increases.

Keywords: ICT, IT Education,

INTRODUCTION:

Quality Education

Education is key for success of individual and our developing countries. A country is valued on the basis number of the citizens have quality education. Quality education undertakes the following points:

- Learners who are ready to learn and participate in learning program and supported in learning to their families and communities;
- Proper environments and facilities should be given to the communities
- Basic knowledge and basic skills, especially in the areas of where no literate peoples, numeracy and skills for life, and knowledge in such areas as gender, health, nutrition, HIV/AIDS prevention and peace;
- Processes through which trained teachers use new techniques for new approaches in well-managed classrooms of schools and colleges and skilful assessment for learning and reduce Lack of confidence.
- Outcomes that include knowledge, skills and attitudes, and are linked to national goals for education and positive participation in society. In recent years there has been a upsurge of interest in how computers and the Internet can best be bind to improve the efficiency and effectiveness of education at all levels and in both formal and non-formal . If the country needs to improve the quality in education the essentials of information and communication technology in its educational system needs urgent attention. Educational systems around the world are under

increasing pressure to use the new information and communication technologies (ICTs). ICT has made an impact on the quality and quantity of teaching, learning and research in the tradition and/or distance education institutions using it. The need for re-orient and re-engineer of its formal education patterns for transformation of its citizens is vital. Uganda (2012) assert that, ICTs greatly facilitate the achievement and incorporation of knowledge, offering developing countries join-up opportunities to improve educational systems, recover policy formulation and execution, and widen the range of opportunities for business and the poor. Nation points out that “this vision of education emphasizes a holistic, interdisciplinary approach to developing the knowledge and skills needed for a sustainable future as well as changes in values, behaviour, and lifestyles. However, Law, Pelgrum and Plomp (2008) opined that, acquisition of information and communication technology skills include the ability to become lifelong learners within a context of collaborative inquiry and the ability to work hard and learn from experts. According to Ossai (2007), the introduction of ICT usage, integration and diffusion has initiated a new age in educational methodologies, thus it has radically changed traditional method of information delivery and usage patterns in the domain as well as offering modern learning experience for both Teachers and students. For developing countries, ICTs have the potential for increasing access to and improving the relevance and quality of education (Uganda 2012). Uganda further stated that, when used appropriately, different ICTs helps to expand access to education, strengthen the relevance of education to the workplace, and raise educational quality by creating an active process connected to real life.

The paper discusses the topic under the following outlines:

1. Types of ICT used in education
2. Benefits of ICT in enhancing quality education
3. obstacles of ICT in improveing quality education

ICT TOOLS USED IN EDUCATION

ICT is a term used to refer to technologies that are used in creating, accumulating, storing, editing and spreading of information in various forms. ICT as described by Bandle (2006) is a revolution that involves the use of computers, internet and other telecommunication technology in every aspect of human endeavour. These include: Internet access, electronic mail, telephone, on line databases, library services and fax machine Uganda & Reddi grouped ICT used in education into two categories namely synchronous and asynchronous media. Synchronous media require all participants to be together at the same time even though in different location, examples of synchronous are audio graphics, audio conferencing as in a telephone conference, broadcast radio and tv, teleconferencing, computer conferencing such as chatting and internet telephony. Asynchronous ICT allow for participants in the learning process to be at different times and different places, examples of asynchronous include audio and video tapes CDs, email, computer files transfers, virtual conferences, media products, offline, web based learning formats etc. Teleconferencing is used in both formal and non-formal learning contexts to facilitate teacher-learner and learner-learner discussions, as well as to access experts and other resource persons remotely. In open and distance learning process, teleconferencing is a useful tool for providing direct instruction and learner to support, minimizing learner segregation. According to Kothmale Community Radio Internet uses both radio broadcasts and computer and Internet technologies to facilitate the sharing of information and provide educational opportunities in a rural community in Sri Lanka. Further noted that the IGNOU in India combines the use of print, recorded

audio and video, broadcast radio and television, and audio conferencing technologies. Further we noted that ICT can expand access to education in the different ways:

- **Anytime, anywhere:** defining feature of ICTs is their ability to trail time and space. ICTs make possible asynchronous learning, or learning characterized by a time lag between the delivery of instruction and its reception by learners. Online course materials, for example, may be accessed 24 hours a day, 7 days a week. ICT-based educational delivery (e.g., educational programming broadcast over radio or television) also dispenses with the need for all learners and the instructor to be in one physical location. Additionally, certain types of ICTs, such as teleconferencing technologies, enable instruction to be received simultaneously by multiple, geographically dispersed learners (i.e., synchronous learning).
- **Access to learning resources:** Teachers and learners no longer have to dependent totally on printed books and other printed materials in physical media housed in libraries and available in limited quantities for their educational needs. With the Internet and the World Wide Web, a wealth of learning materials in almost every subject and in different range of media can now be permitted from anywhere at any time of the day and by an infinite number of people. This is particularly noteworthy for many schools and colleges in developing countries, and even some in developed countries, that have limited library resources. ICTs always make easier to access to resource persons- mentors, experts, researchers, professionals, business leaders, and aristocrats all over the world. Improving the quality of education and training is a critical issue, particularly at a time of educational expansion: ICTs can improve the quality of education in several ways; by giving continues motivation to learner and rendezvous, by facilitating the acquirement of basic knowledge, and by improving teacher training. ICTs are also transformational tools which, & when used properly, can promote to a learner-centred atmosphere..
- **Motivating to gain knowledge:** ICTs such as videos, television computer software that combine text, sound, and colourful and moving images can be used to bestow challenging and realistic content that will engage the student in the learning process. Interactive radio likewise makes use of sound effects, songs, dramas, different skits, and other performance conventions to induce the students to listen and become mixed -up in the lessons being delivered. More so than any other type of ICT, net- worked computers with Internet connectivity can increase the motivation as it combines the media richness and interactivity of other ICTs with prospect to connect with real people and to participate in real world events.
- **Improving lecturer training:** ICTs have also been used to improve the quality of lecturer training.

BENEFITS OF ICT IN QUALITY EDUCATION

There are abundant benefits derived from the use of ICT tool in improving quality ICT education such as the ability for learner to choose when to learn without stress. Secondly, ICT also allow learners to discover new ideas from experts around the global world through the use of the ICT tools facilities. Thirdly, the existence of ICT into education system, will deliver the lectures to students, monitoring the learners progress and evaluation can be done time to time. However, Uganda (2012) listed the following as the benefits derived from the use of ICT in education:

- **Active learning:** ICT-improved learning and mobilizes tools for exams, calculation and analysis of information, thus providing a platform for student inquiry, analysis and for new information. Learners therefore learn as they do and, whenever proper, work on real-life problems in-depth, making learning less abstract and more significant to the learner's life circumstances. In this way,

and in contrast to memorization-based learning, ICT improves learner situation. ICT-enhanced learning is also “just-in-time” learning in which learners can choose what to learn, when to learn and why to learn.

- **Mutual learning:** ICT-supported learning which encourages interaction and cooperation among students, teachers, and experts regardless of where they are. Apart from modelling real-world interactions, ICT-supported learning provides learners the opportunity to work with people from different cultures, thereby helping to improve learners’ communicative skills as well as their global awareness. It models learning done throughout the learner’s lifetime by intensifying the learning space to include not just aristocracy but also mentors and experts from different fields.
- **Inventive Learning:** ICT-supported learning promotes the manipulation of existing information and imagination and creation of real-world products rather than the regurgitation of received information.
- **Integrative learning:** ICT-improved learning promotes a integrative approach to teaching and learning. This approach eliminates the artificial separation between the different disciplines and between theory and practice that showed the traditional classroom approach.
- **Evaluative learning:** ICT-enhanced learning of student-directly. Unlike static, text- or print-based educational technologies, ICT-enhanced learning recognizes that there are many different ways to get the knowledge. ICTs allow learners to delve and search rather than listen and memorize.

FACTORS THAT OBSTRUCT ICT IN QUALITY EDUCATION

The hindrances that affecting ICT in quality education are various but some include issues such as :

- Deficient ICT facilities and unsophisticated accessories
- Improper electric power supply.

Because of , improper power supply most of the ICT operations in its higher institutions and at homes thus causing frequent damages of the existing ICT equipment which hinder ICT uses in enhancing quality education. According to a scientist (2007) all ICT equipment, infrastructure and terminals depend on electricity to energize, unless this fundamental source is always available and reliable, they will not be able to fully enjoy the benefits that the digital revolution offers and that overcoming the energy crises is a major pre-requisite for men to achieve its Vision 20-2020 of national.

- Noted that, the most common problems associated with the effective implementation of ICT are lack of qualified ICT personnel, cost of equipment, management attitudes, inconsistent electric power supply, inadequate telephone lines, particularly in rural areas and non inclusion of ICT programmes in teacher’s training and at the basic levels of education. Pelgrum (2001) stated that, obstacles for ICT implementation include the following: Insufficient number of computers, teachers’ lack of ICT knowledge/skills, difficult absorbs ICT to instruction, scheduling computer time, not enough peripherals, inadequate copies of software, insufficient teacher time, not smooth process, not enough supervision staff and lack of technical assistance. In addition, Lewis (2002) summarized these barriers as limited equipment, scarce skills, nominal support, time constraints and the teacher’s own lack of interest or knowledge about computer.
- Method of Data Collection and Analysis of Data
- A total of fifty questionnaires were administered. A sample of twenty five staff in each of the three institutions Lokmanya Vidya Niketan, commerce Training Institute and Adarsh institute were used. The fifty Questionnaires were retrieved immediately from the respondents.

Table 1: Institution involved in the Research

Name of institution	Number of questioner
Lokmanya Vidhya Niketan	10
Commerce training institute	20
Adarsh institute	20

TABLE 2: Institution and ICT tools used by Staff

Tools Used	Lokmanya Vidhya Niketan	Commerce Training Institute	Adarsh Institute	Total	%
Internet	10	20	20	50	100
Email	10	20	20	50	100
CD-Rom	10	20	20	50	100
Telephone	10	20	10	50	100
Online database	4	2	4	10	16.6
Fax machine	3	2	2	7	11.6
Photocopier	10	10	6	26	43.3
Scanner	8	5	8	21	35
Computer	10	20	20	50	100
Teleconferences	0	6	8	14	35

Table II: ICT tools used

The study reserved the three higher instructions surveyed in this research showed that in all the instructors they used the following ICT tools .in the course of research on study these include internet, email, CD-ROM, telephone , machine, photocopier, scanner, computer. Very small staff of the three institutions has been involved in teleconferencing. The study spelt out across the three institutions. each of the staff sampled for study showed the entire staff have used the internet, email, CD-ROM, telephone, computer few of the staff have used online database, fax machine, photocopier scanner .the study as shown in Table II revealed that very small number of the staff out of the 50 randomly sampled for the study have been involved in the conferencing.

TABLE 3: Benefits derived from the use of ICT facilities

Benefits	Lokmanya Vidhya Niketan	Commerce Training Institute	Adarsh Institute	Total
Access to what I need anytime	10	10	14	34
Access to resources I want anytime	6	18	14	45
easy access to resources for research	6	16	15	37

Improve in the quality of education	7	18	11	36
Quality of research improvement	8	12	13	33
Quick access to expert	4	4	16	24
Teaching and learning improvement through the use of quality information resources	6	5	15	26
Active learning improvement	6	12	12	30
mutual learning	7	16	14	37
artistic learning	8	12	13	33
interactive approach to learning	6	9	11	26

Table III : the table on the benefits derived from the used of the ICT tools the study revealed that the three institutions used have benefited greatly from the ICT facilities through staff benefit from ICT tools through quick access to research experts .Many staff reported that ICT as a tool helps them to enhance their teaching and learning skills through the use of quality information resources. the study also revealed that ICT tools enhance artistic learning, encourages mutual , learning. ICT tools are beneficial for every age.

Table 4: Factors that obstruct quality ICT education in India

Factors	Lokmanya Vidhya Niketan	Commerce Training Institute	Adarsh Institute	Total
Insufficient ICT facilities	5	16	11	32
Insufficient accessories	4	8	10	22
less fund to replace components	5	13	15	33
Improper electric power	8	17	14	39
Wobbly electric power that damages ICT components	8	18	17	43
practical demonstration and involvement of trainees in implementation	8	8	6	22
limited theoretical illustration of approaches	6	18	6	30

Table IV: Considering the factors that obstruct quality ICT education in India the study revealed insufficient ICT facilities, insufficient accessories, less fund to replace with new components,

improper power supply, wobbly electric supply limited theory illustration etc all this points affect the quality education through ICT tools.

SUMMARY OF FINDINGS

The study finds out that:

1. ICT facilities through the various tools considered are very important for quality education in india
2. Internet, telephones, scanner, photocopiers are highly needed in all education
3. The benefits derived from ICT tools is the different for different institutions. .
4. The factors that obstruct quality ICT education in India includes insufficient ICT facility like less fund., improper electric supply etc..
5. ICT training should be practically demonstrated, to get full practical knowledge for students
6. Funding of the ICT tools should not be ignored.
7. ICT training programmes should be done timely.

CONCLUSION

It is imperative and equally inevitable to say that quality ICT tools are a prerequisite to quality ICT education. Therefore quality ICT facilities should be made available, and equally made easy for staff and students to obtain in order to get quality education.. It is nice to say that ICT is a tool which improves quality education for every individual ,which helps to increase our national income . ICT therefore should be implemented fully in the educational system and all the places like offices, police department, army and everywhere so that each person can use ICT tools efficiently to get knowledge and stay connected with everyone . Therefore, issues and challenges of ICTs in education should be given urgent attention. Proper electric supply should be given and proper fund also to make our next generation smart by taking quality education

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