ICT IMPLEMENTATION FOR EDUCATION AND LEARNING

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ABSTRACT

The study analyses the level of integration of the information and communication technology (ICT) in Education. It has been essential requirement in educational institution for learning and teaching in the present day of digital environment. The paper highlight the implementation of ICT in Education and also defines about how teacher-learner do make heavy use of ICT in their daily teaching and learning process, which is a necessity in this fast changing world whereby ICT is taking over all fields. Moreover, this study also aims at identifying the factors that are responsible to determine the level of integration of ICT in Education. This paper elaborates upon the concept of ICT integration, effective use of ICT for education with regard to the teaching learning process and ICT to enhance the scholastic performance.

Keywords: information technology, Communications technology, Integration, Implementation.

Introduction:

During the past decade there has been an exponential growth in the use of information and communication technology (ICT) which has made pervasive impacts both on society and on our daily lives. The use of information and communication technology have caused many changes in society. These changes have not just been of a technical nature but more importantly of a structural nature. It is thus not surprising to find increasing interest, attention and investment being put into the use of ICT in education all over the world. ICTs have become within a very short time, one of the basic building blocks of modern society. In addition to efforts to employ ICT to improve learning, the emergence of the knowledge economy has also brought about a much greater emphasis on education. A number of master plans on ICT in education has been produced in many countries. Such plans reveal that educational innovations in ICT have been increasingly embedded within a broader framework of education reforms that aimed to develop students "capacities for self- learning, problem solving, information seeking and analysis, and critical thinking, as well as the ability to communicate, collaborate and learn, abilities the figured much less importantly in the curricula. The relatively recent introduction of new technology into mainstream schooling was widely expected to penetrate and transform teaching and learning across the curriculum.

Information and communication technologies (ICT) is an indispensable part of the contemporary world. In fact, culture and society have to be adjust to meet the challenges of the knowledge age. The field of education has not been unaffected by the influence of information and communication technology. Even ICT has impacted on the quality and quantity of teaching, and

learning, research in traditional and distance education institution. In concrete terms, ICT can enhance teaching and learning through its dynamic, interactive, engaging and content and it can provide really opportunities for individual in research, ICT provides opportunities for school to communicate with one another through email, mailing list, chat room, and so on. It also provide quicker and easier access to more extensive and current information, and it can be used to do complex mathematical and statistical calculations.

The Importance of ICT in Education:

Information and Communication Technologies have recently gained groundswell of interest. It is a significant research area for many scholars around the globe. ICT basically refers to use of technology in communication, data processing and data storage to impact the knowledge on learners. ICTs help to achieve the goals of educational programs for several reasons. The benefits of ICT seem suitable for coping with the issue of basic literacy and technological literacy, even among the poorest population sectors. Computer Based Learning (CBL) and teaching makes learning more efficient and more interesting to learners thus improving the quality of education. The knowledge deepening approach has a greater impact on learning. Its policy goal is to increase the ability of learners, to add value to education. ICT include computers, the internet, broadcasting technologies (radio and television) and telephony. While the rise of computer and internet has provoked great interest in the ways in which they can be applied in education to improve its efficiency and effectiveness at all levels. Older technologies, television have been used for distance learning. As a result of the increasing application of ICTs in education, a number of new learning approaches have emerged. E-learning encompasses learning at all level, formal as well as non formal using information networks such as the internet, and LAN or WEN for course delivery.

The followings are the aim and objectives of ICT implementation in education:

1. To implement the principle of life-long learning/education.
2. To increase a variety of educational services and medium/ method.
3. To Promote equal opportunities to obtain education and information.
4. To develop a system of collecting and disseminating educational information.
5. To promote technology literacy of all citizens, especially for students.
6. To develop distance education with national contents.
7. To promote the culture of learning at school (development of learning skills, expansion of optional education, open source of education, (etc)
8. To support schools in sharing experience and information with others.

ICT offers increased possibilities for codification of knowledge about teaching and for innovation in teaching activities through being able to deliver learning and cognitive activities anytime and any where. By virtue of government Interventions and training seminars organized in this regard, ICT tools stimulate teachers. Indeed, an absolute majority of teachers claim to use

ICT to do tasks, such as preparing lesions, sequencing classroom activities, etc. Therefore, teachers plan their lessons more efficiently. ICT also help teachers to work in teams and share ideas related to schools curriculum. There is also evidence that broadband and interactive whiteboards play a central role in fostering teachers" communication and increasing collaboration between educators.

Therefore, ICT can improve teaching by enhancing an already practiced knowledge and introducing new ways of teaching and learning. Transforming teaching is more difficult to achieve."Changes that take full advantage of ICT will only happen slowly over time, and only if teachers continue to experiment with new approaches".

Implementation & Direction for Future:

Open and distance learning is a learning approach in which teacher and learner are separated in time or place and uses a variety of media, including print and electronic to ensure a two-way communication that allows tutors and learners to interact.ICT have the potential to increase access to and improve the relevance and quality of education in developing countries. ICTs can be used to provide educational opportunities to people who have previously had no access to education. Such as rural populations, groups traditionally excluded from education because of social reasons. ICT based educational delivery also dispenses with the need for the Instructor and all learners to be in one physical location. Some types of ICTs, such as teleconferencing technologies, make it possible for multiple. The internet and the world wide web also provide access to learning materials in almost every subject and in a variety of media anywhere any time of the day and to an unlimited number of people. One of the most commonly reasons for using ICTs in education has been to better prepare students for a workplace where ICTs are becoming more and more ubiquitous. In addition, ICTs can improve the quality of education by increasing learner engagement and motivation by facilitating the basic. Skills and by enhancing teacher training. However, there is lack of good monitoring and evaluation tools and processes for the use of ICTs in education.
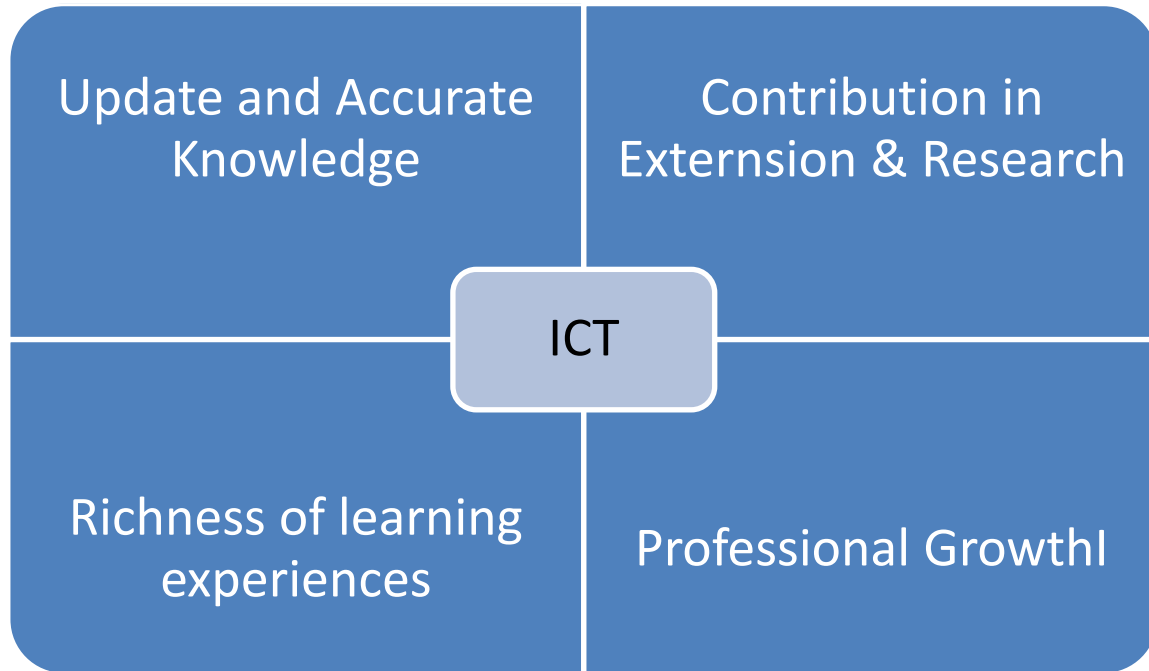
Numerous studies comparing traditional classroom-based instruction with technology- enhanced instruction have found insignificant differences in student satisfaction, attitudes, and learning outcomes. Effective ICT integration into the learning process has the potential to engage learners. For instance, using multimedia to present

Authentic and ill- structured problems in problem-based learning can motivate and challenge students and hence develop their problem-solving skills.

ICT can support various types of interaction: learner- content, learner-learner, learner-teacher, and learner-interface. These types of interaction make the learning process more interactive and learners more active and engaged. The primary factor that influences the effectiveness of learning is not the availability of technology, but the pedagogical design for effective use of ICT. The computer should be fitted into the curriculum, not the curriculum into the computer. The

implications for the traditional academic curriculum of introducing a powerful set of cross-curricular tools and resources are considered, along with the influences of established curriculum practice and policy upon teacher's willingness to develop new form of activity and pedagogy.

Objectives of ICT in Education

Update and Accurate Knowledge	Contribution in Externsion & Research
ICT	
Richness of learning experiences	Professional Growthl

Evolution of ICT in Education

The history of communication has changed rapidly since the dawn of time. From sending smoke signals to instantly having the ability to seek help, communicate with others, and find information, changes in communication have shaped today's way of living. These techniques were later applied to the business environment where mainframe computers and robotics were used to automate business processes and number crunching functions. From automation of business processes, IT was then applied to higher value-adding, functions such as design, resource planning, sophisticated manufacturing and mission critical functions the developments and applications of IT have stretched beyond imagination. Together with the rapid development and innovation in telecommunication technology and the Internet, this evolution has ushered in many new business models and applications. ICT is robust that it can be harnessed in many ways, but its true potential is limited only to the human mind.

With ICT, the physical boarder dissipates as information moves freely through the digital medium which is less controlled as compared to other existing mass media. Globalization is said to accelerate, and enabled by ICT, making market bigger and more accessible by business with strong capital, management and technology. Business or E-commerce has started to be done virtually and transaction occurs at a click of a mouse anywhere and any time. Scientific findings

churn faster and newer discoveries and inventions through the journal and reports are made available through ICT. The technology that began life as a faster way to process data and compute statistics has become pervasive in almost all parts of our life today. So ICT has become the backbone of Society, having combined both information technology and communication through digital environment today.

Conclusion-

Education, Policy makes, administrations and teacher preparation and professional developments programs now should embed these tools and recourses into their practices. Although the presence of technology does not ensure quality and accessibility in learning, it has the power to lower barriers to both in ways previously impossible. No after their perceived abilities or geographic locations, all learners can access resources experiences, planning tools and information that can set them on a path to acquiring expertise unimaginable a generation ago.

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