ABSTRACT

The world is changing fast. This is the age of transformation of technologies, in all the ways of our life. It is sometime claimed that the introduction of information and communication technology (ICT) into school can significantly transform schools and organizational culture. ICT also can be used to launch innovation in schools and provide communities with new educational services. Educational innovations aimed at attaining these new skills, knowledge with the help of ICT and finding a new balance between old and new educational targets are needed. This paper presents the ICT is a new horizon in learning environment both for teachers and students.

KEYWORDS

Information Communication Technology (ICT), computer, teacher and student

INTRODUCTION

Education is one of the main keys for the development and improvement in human welfare. As global economic competition grows sharper, education becomes an important source of competitive advantage, closely linked to economic growth, and a way for countries to attract jobs and investment. In addition, education appears to be one of the key determinants of lifetime earnings [1]. However there are many constraints on delivering education to the right people at the right time. To meet these constraints educators encourage to show interest in the use of information communication technology (ICT) to deliver education and see the use of ICTs in the classroom mainly as a way to teach computer literacy. Schools and universities prefer to use ICT to reduce the learning cost with higher quality than traditional methods of teaching.

Information and communication technology has become, within a very short time, one of the basic building blocks of modern society. Information technology (IT) is defined as the technological application of to-days information society. Developments in Information and Communication Technologies (ICTs) have impacted all sectors of society, including the education sector. Many countries now regard understanding ICT and mastering the basic skills and concepts of ICT as part of the core of education.

This paper consists of six sections. Section 2 is about relevance of ICT in today scenario. Section 3 is on the challenge ahead. Section 4 describes the radical change in school. Section 5 is on new horizon and Section 6 is on conclusions.

RELEVANCE IN TODAY SCENARIO

The introduction of Information and Communication Technology (ICT) in the year 1992 was a dawn of school education [2]. It was the first time when the Information and Communication Technology was reckoned as a formal discipline curriculum to cater the needs of IT professional in the country. Since then ICT acquires both recognition and status in formal education circle. Indian schools have propagated ICT through a special designed syllabus. It creates a good measure of awareness among the students, local parents, teachers, and community groups.

There were high expectations that with the introduction of ICT in the educational institutes, ICT would make education more effective and motivating. However, many surveys have shown that computers are used mainly as a supplement to the existing curriculum and much less as tools that were integrated in the learning of traditional subjects. The general feeling among many policy-makers was one of great disappointment [2]. The investment in hardware, staff development and research programmes on ICT has decreased. However when the World
Wide Web becomes available, the interest in ICT was quickly boosted. This interest in ICT in education system would need to prepare for lifelong learning in an information society. This involves the initiatives by local parents, teachers, and community groups to take over the management of government schools, but with financial support being guaranteed by the state under the some form of charter agreement.

In fast growing of superhighways of information technology, ICT in education is to give momentum, speed and direction to budding the students who are more than convinced and the seeds of IT education will ensure a rich harvest in terms of gainful opportunities in the world of IT.

THE CHALLENGE AHEAD
With changes in science and technology, our lives are undergoing phenomenal changes in all aspect of life. Things are really moving on to fast tracks. What ever creative person is looking for is a chance to change with changing world. It is a race on the superhighway: one who maintains the speed will merge triumphant. The boom in ICT in education does pose a number of challenges. Most of these challenges stem from the pace at which paradigms are changing. ICT is being considered as an exquisite tool of making things happen though a well-orchestrated team effort. The local parents, teachers, and community groups are being viewed as a partner a mega change indeed!

In the organizational context, it is sometimes claimed that the introduction of ICT into schools can significantly transform school organization and culture [4]. However, the causality in this relationship is likely bi-directional: the introduction of technology promotes organizational change in schools and transformed school organization can increase the use and impact of ICT. It also has been observed that ICT can have an impact on students beyond their knowledge of traditional school subjects. A number of studies have established that computers can have a positive effect on student motivations, such as their attitudes toward technology, instruction, or the subject matter [4].

One of the challenges of the ICT in education is to establish a very good infrastructure, where students could get valuable learning knowledge and skill for participating in some kinds of international and national assignments in their future. This would considerably boost their confidence of providing their mettle, if given the opportunity. As knowledge becomes more central to competitiveness, the ability of individuals to learn and re-learn becomes primary means of surviving and writing. In this context, ICT in education must be made absolutely sound, rational and well balanced. The updating of curriculum needs to be done to make them compatible with the needs and expectation the real challenging in future. The restructuring of course each subject in the curriculum comprises a unique and distinct set of knowledge, skill and understanding within a common process underpin every subject.

Accepting these key process were around long before ICT, it is the ability of ICT to facilitate them, regardless of the particular subject or body of knowledge being studied, that makes it such a powerful tool for the modern educator and even raises the question as to whether or not a subject-based curriculum remains the best approach for leaving, working and learning in a modern society [5].

THE RADICAL CHANGES
The radical changes in information technology leave the people gasping at the marvels of science and technology and grappling with obsolescence. ICT in education should encompass and stress on knowledge about IT to enable learning at the laptop computers. Today ICT is becoming important for educational provision, especially in the context of the knowledge society; it should always be seen as only one aspect of impacting on learning [6]. It is very known that teaching and learning consists of combination of different mode of communication through media. Under different situation, different communication media are suitable. Different communities suggest that ICT is the best media for knowledge learning in today highly fast growing knowledge society, as it can support a range of communication strategies between educator and learner. Using ICT in school education arises as part of a strategy to solve other schooling problems, often at first unrelated to ICT [7]. It is important that ICT can be seen as one strategy for improving the educational provision. Despite of the achievement in implementing ICT for teaching and learning processes, following uses are required to consider.

(I) A proper institutional ICT policy and strategic plan: Planner and administrator need to be aware of the importance of implementation strategies and of role of different regularity mechanisms in this regard. Hence policy and planning is a way of organized learning by acting and correcting. (II) Enough ICT infrastructure: A much in school education, ICT infrastructure such as Local Area Network (LAN), Internet, computers, video, audio, CDs and DVDs (III) ICT skill levels in the institution: Some level of skill is required to promote in the institutions. (IV) Number of staff and students: (V) Academic management process (VI) Cost-effectiveness analysis (VII) Choice of proper technologies for the needs of the institution (VIII) Staff development in new technologies (IX) Administrative support (X) Applying ICT to teachers’ subject areas and (XI) Enough funds.

Woodrow [7] pointed out that positive attitude towards ICT is widely recognized as a necessary condition for effective implementation. Full involvement of all stakeholders in the implementation process is a key to addressing awareness and attitude problem. Formally organized awareness programmes, visits to similar institution, where success has occurred, and short trainings can contribute to raise the awareness and change the attitude of stakeholders towards facilities and services [8].
NEW HORIZON IN EDUCATION
Over the pass few decades, there has been major transformations occurring in the formal education sector as well as in other areas that are important for enabling people to develop new capabilities necessary for the knowledge/information society [9]. These changes are made due to the drastic changes of technology and development of ICT in the form of networking, knowledge sharing, and interactive learning.

The school ICT specialist manager makes available ICT resources, such as computer laboratories in the school and stand alone computers in the classrooms together with access to these. There is limited range of computer peripherals such as printer with usage specific to the ICT curriculum. Internet access is available for some of the computers in the school. Software is available to teach the ICT curriculum. The applications are used within teaching context created by individual teachers to provide clear and predictable results for students, ensuring success. The Internet and World Wide Web are used in customized way with planned access to selected sites to ensure predictable outcomes to lessons.

A success story of ICT in school in India [9,11] is Sharda – India

Success strategy: Sharda is an innovative approach to bring students to school by using ICT for facilitating learning and increasing student's interest and motivation. The project is targeting urban poor children living in slums and LIG group community. By the end of 2006, under the project have been established 487 computer-learning centres in municipal primary schools in Delhi and a number of students are now learning through computers. The network is made possible by the work of 500 education volunteers and 2500 PCs working under Linux OS. The project aims to bridge the digital divide and build the confidence of the under-privileged communities by providing them with equal learning opportunities, in particular in mathematics and languages.

Partners: The project is being implemented by the Municipal Departments of Education in Delhi, HCL Infosystems, Azim Premji Foundation and Red Hat.

Source: The NICT website and an online questionnaire sent by Hajela Mukesh in October 2006.

When we are learning in a way that utilizes the information management and technology (IM&T), then we are using e-learning. E-learning is another area of new horizon in ICT in today’s modern educations system. The definition of e-learning, accepted by the North Staffs PCT’s & Combined Healthcare Trust representatives, was agreed as:

“E-learning is the use of electronic technology to deliver, support & enhance teaching and learning”
It has the potential to revolutionize the way we teach and how we learn. It can raise standards, and widen participation in lifelong learning. It cannot replace the need for trainers, but alongside existing methods it can enhance the quality and reach of training, as well as reduce the time spent on administration [12]

CONCLUSIONS
ICTs provide great opportunity for schools to improve their teaching and learning processes. ICT has the potential to revolutionize the way in which the teachers teach and students will learn through utilizing Information Technology to either replace or enhance existing traditional learning methods. As such, there is an obvious need for a ICT strategy to provide clear strategic aims for the application of teaching and lifelong learning.
A common ICT strategic framework will assist in maintaining quality standards and ensure suitability, as well as promote a shared community of life long learning and a new dimension of development in the school organization.

REFERENCES
8. A. S. Sife, E.T. Lwoga and C. Sanga New technologies for teaching and learning: Challenges for higher learning institutions in developing countries. Sokoine University of Agriculture, Tanzania

11. http://www.itu.int/osg/spu/wsis-themes/ict_stories/themes/community.html (NICT website and an online questionnaire sent by Hajela Mukesh in October 2006.)