

# INFORMATION AND COMMUNICATION TECHNOLOGY IN EDUCATION: A NEED TO FRAME AND UTILIZATION

Zubair Ahmad Bhat

E-Mail Id: zubairscholar@gmail.com

Research Scholar, Department of Comparative Languages and Culture  
 Barkatullah University, Bhopal, Madhya Pradesh (India)

**Abstract-** Information and communication technology (ICT) has become one of the basic building blocks of the post modern era. Almost all countries now consider understanding ICT and mastering the fundamental skills and concepts of ICT as part of the core of education. The aims of UNESCO is to guarantee that all the countries who are either developed or developing have access to the best educational facilities required to organize young people to play the vital roles in modern era and to contribute to a knowledge to the nation on whole. Information and communication technology is the advanced technology in science which deals wholly and solly with the purpose of education and its other aspects in different levels of education at senior and secondary levels. It is the wider concept in educational technology and is one of the most important applications of technology which aims at building and covering the basic tenants of senior and secondary education. It is widely used by almost all countries as a part and parcel of their curriculum in enhancing the educational system of the senior and secondary level. This paper throws light on information and communication technology as a best tool widely used in the levels of senior and secondary levels of education in developed and developing countries and also this paper shows the need and importance of information and communication technology in today's education as well as in society.

**Key Words:** Information and Communication Technology, Society, Education, Modernism etc.

## 1. INTRODUCTION

### 1.1 Information and Communication Technology and Education

Information and communication technology is one of the key aspects of the modern education system in developed and developing countries in almost all the countries of the world. It is the one of the vital and necessary tool of the advanced sciences of the post modern era which deals with the educational system of senior and secondary levels of developed and developing countries throughout the world. It provides governments with an efficient infrastructure, and at the mean time, it adds worth to the processes of learning to the organization and management of learning institutions. Internet is a better tool for much development and innovation in both developed and developing countries which gives almost all information about the all sections of the society. All Countries must be able to take advantage from technological developments so as to be able to do so, a cadre of professionals has to be educated with sound ICT backgrounds, self-determining of particular computer platforms or software environments. Technological developments changed the whole scenario of work as well as change in the organization of work, and also competencies are therefore changing at each and every moment. Gaining in consequence is one of the following competencies as under:

- Generalist (broad) competencies,
- Critical thinking,
- ICT competencies enabling expert work,
- Decision-making,
- Handling of dynamic situations,
- Working as a member of a team,
- Communicating effectively.

## 2. CURRICULUM AND TEACHER DEVELOPMENT

Curriculum is necessary for the teacher as it is the part and parcel of teaching learning process and without it a teacher cannot go for the smooth running of the teaching learning process. So it is mandatory for an educational institution to have a curriculum present in their institute and which will ultimately lead to the development of teaching learning process. Talking of the information and communication technology curriculum for schools it offers them the rapid advancement in the enhancement of their teaching learning process. Mainly important is the want to integrate or infuse ICT significantly throughout all school subjects. The curriculum has been designed in

## International Journal of Technical Research & Science

modular form so that education establishment can select suitable elements to meet their objectives at the point of improvement reached in their countries. Teachers require to be sufficiently prepared to put into practice a state-of-the-art ICT curriculum. without a doubt, introducing any original curriculum calls for vigilant preparation, administration, resourcing, and enduring hold up.

Educational research studies have shown that programmed of proficient growth for teachers are mainly victorious if intended for the stage of ICT progress reached by schools. The implications of these investigate results are that teacher maturity is best conceived as a continuing process, with many specialized improvement activities conducted in schools.

### 3. INFORMATION AND COMMUNICATION TECHNOLOGY DEVELOPMENT

In a rising curriculum for ICT, it is functional to have a model for ICT progress. Such a model is not a minute copy of some three dimensional object but slightly a demonstration of the necessary characteristics of ICT expansion to offer a gibbet or construction. Such a construction shows the interrelationship of a variety of apparatus within a system and aids considerate by educational administrators and policymakers. The two models are accessible here to make available a support for what follows. The first model conceives ICT improvement as a gamut along which an educational system or an individual school can pin down the advance that relates to the escalation of ICT for their meticulous background. This model is referred to as a gamut of approaches to ICT growth.

The second model depicts dissimilar stages in the way that those who, in the majority are involved in the use of Information and Communication Technology in schools – teachers and students – find out, learn about, appreciate, and concentrate in the use of ICT tools. This second model is considered as the stage of teaching and learning with and through ICT.

### 4. A CONTINUUM OF APPROACHES

It has been studied that ICT development in both developed and developing countries identified at least four broad approaches all the way through which educational systems and individual schools continue in their implementation and use of ICT. These four approaches are considered as emerging, applying, infusing, and transforming, which represent a continuum.

### 5. STAGES OF TEACHING AND LEARNING

Teaching and learning are not separate and independent activities, but rather these are considered as two sides of the same coin which are interconnected and interrelated to each other. The studies of teaching and learning in schools around the globe recognize four wide stages in the way that teachers and students study about and increase self-assurance in the use of ICT. These four stages are, discovering, learning how, understanding how and when, and specializing in the use of ICT tools.

### 6. APPLICATION OF ICT IN SUBJECT AREAS

This wide area of the curriculum covers the application of ICT tools for operational within comprehensive subject areas such as languages, natural sciences, mathematics, social sciences, and art. Particular units include measurement, modeling and simulation, robots and feedback devices, statistics, creating graphics, spreadsheet design, and database design.

### 7. PROFESSIONAL DEVELOPMENT OF TEACHERS

In the straightway that a model proves useful in developing a curriculum structure for schools, the model is likewise useful in preparation for the proficient development of teachers, which is so necessary in the proficient life of teachers when they begin to use ICT.

### 8. EMERGING ICT SKILLS AND KNOWLEDGE

In the up-and-coming move toward the ICT growth, the core is on the industrial functions and uses of ICT and on the need for various facts and illustration of the impacts of ICT systems as a complete. This move toward often involves teachers' personal use of ICT, such as, for instance, the use of word processing to prepare worksheets, locating information on CD-ROMs or on the Internet, or communicating with friends and family by email. Here, teachers are mounting their ICT literacy and learning how to apply ICT to a sort of personal and professional responsibilities. The prominence is on preparation in a series of tools and applications, and rising teachers' consciousness of the opportunities for applying ICT to their teaching in the future.

## CONCLUSION

Hence it is concluded that information and communication technology plays an important role in the educational sector of any country. It is the measure tool of technology which is widely used in this modern era. It is one of the best tools of the technology which is used as a means of way to the educational system of the secondary education of almost all countries. This tool of technology is one of the biggest factor and molding one in the educational system of developing and developed countries.

## REFERENCES

- [1] Department of Education and Employment. London. 2002. National Curriculum for England. Available: <http://www.nc.uk.net> (2002), January 24.
- [2] Department of Education, Hawaii. 1999. Hawaii Content and Performance Standards. Office of Accountability and School Instructional Support/School Renewal Group, Honolulu, Hawaii, USA. Available: <http://www.hcps.k12.hi.us/> (2002), January 24.
- [3] European Computer Driving Licence Foundation. 2002. European Computer Driving Licence (ECDL). Available: <http://www.ecdl.com/> (2002), January 24.
- [4] International Federation for Information Processing. 2002. IFIP Working Group 3.2: Informatics Education at the University Level. Available: [http://Poe.netlab.csc.villanova.edu.edu/ifip32/main\\_page.html](http://Poe.netlab.csc.villanova.edu.edu/ifip32/main_page.html) (2002), January 24.

WWW.IJTRS.COM