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A STUDY OF INFORMATION TECHNOLOGY ON TEACHING-LEARNING PROCESS IN INDIA

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ABSTRACT

Today the changes brought about by new technology had a significant effect on the life of people living in every corner of the globe. Traditional process of teaching and learning in education has been replaced by new and emerging technologies. Information Technology is having a major impact on all areas of education- curriculum, methods of teaching, classroom learning etc. Rapid communication with increased access of Information Technology (IT) in home, work place and educational institutions has make education a life-long process. Information technology helps in promoting opportunities of knowledge sharing throughout the world. These can help teachers and students in gaining up-to-date information and knowledge. For effective teaching and learning right information is necessary. Information technology is a set of tools that can help the right people with the right information at the right time. This paper highlights the importance of IT in educational sector, impact of IT on classroom teaching, advantages and disadvantages of IT.

KEYWORDS: *information, technology, education, communications, quality education, classroom.*

INTRODUCTION :

The education has vital role in building the society. It is one of the most important needs for the well being of individual and the society. Quality education helps to empowering the nation in all aspects. There are many ways to increase the learner's knowledge, and technology is the most effective way. ICT is an acronym that stands for Information Communication Technologies, that includes all technologies for the manipulation and communication of information (Swati Desai, 2010). Broad definition of ICT includes radio, television, satellite, mobile phones, computers and the internet. It can be divided into two groups; traditional ICT namely radio, television and the new ICTs like internet and telecommunications. Learning through new ICTs is also called e-learning. Information and communication technology (ICT) is an indispensable part of the contemporary world. It is a force that has many aspects of the way we live, and also an electronic means of capturing, processing, storing and communicating information. The potential of information and communication technologies today, from the time we awaken in the morning to the time before we sleep, we are surrounded by media, such as newspapers, radio, television and computers. Sometimes we are not even aware that we are surrounded by these media. All these media come under the overall umbrella of ICTs. Impact of ICT in education includes two things-ICT and education. It includes any communication device, application or service used to educational purposes to support and improving the learning of the students. ICT can be considered as a sub field of educational technology. According to UNESCO: ICT is a scientific technological and engineering discipline and management technique used in handling information in

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application and association with social, economic and cultural aspects. Appropriate use of ICT can transform the whole teaching-learning processes leading to paradigm shift in both content and teaching methodology **(Oliner, S. and Sichel, D. (2000).**

Today knowledge and information are the main keys of obtaining the productivity, competition, wealth and comfort. So human beings have concentrated on approaches for gaining better quality of education in the 21st century is the centre from which all changes and developments arise. Today information technology has the ability of facilitating the education and learning process. Information technology is referred to the knowledge process and its applying methods, processing, transferring and making information in progress IT includes gathering, organizing, storing, publishing and using the information in the form of sound , picture graphic, text, number, by using the computer and telecommunication tolls. Important changes resulting from IT, has became the source of basic changes in the classes. The most important changes have roots in this fact that technology has enabled students to accent the out-of-class information and this has caused the increase of their motivations for learning. Information Technology has affected changed to the methods, purpose and perceived potential of education. Information technology can provide necessary educational information when needed. Technology is bound to rule our present and our future. This is an escapable fact that we need to face. It has ruled over different facets of our life and influenced the way we live. Computers and the Internet technology in particular have undoubtedly revolutionized the field of education. It plays an important role in this field. The student teacher interaction has drastically changed since the introduction of technology based class structure. The teacher is no longer the centre of the classroom but rather a middleman between information and student. Instead of a being passive listener, the students now become active in gaining, rearranging and displaying information. (Kausik Bhagta, 2016)

ICT in higher education

The major teaching and learning challenges facing higher education revolve around student diversity, which includes, amongst others, diversity in students' academic preparedness, language and schooling background. Education is perhaps the most strategic area of intervention for the empowerment of girls and women in any society and the use of information and communication technologies (ICTs) as an educational tool in the promotion of women's advancement has immense potential. The application of ICTs as a tool for effective enhancement of learning, teaching and education management covers the entire spectrum of education from early childhood development, primary, secondary, tertiary, basic education and further education and training. Integrating ICT in teaching and learning is high on the educational reform agenda. Often ICT is seen as indispensable tool to fully participate in the knowledge society. ICTs need to be seen as "an essential aspect of teaching's cultural toolkit in the twenty-first century, affording new and transformative models of development that extend the nature and reach of teacher learning wherever it takes place" (Leach, 2005). For developing countries like Vietnam, ICT can moreover be seen as a way to merge into a globalizing world. It is assumed that ICT brings revolutionary change in teaching methodologies. The innovation lies not per se in the introductions and use of ICT, but in its role as a contributor towards a student-centered form of teaching and learning. The Information and Communication Technology (ICT) curriculum provides a broad perspective on the nature of technology, how to use and apply a variety of technologies, and the impact of ICT on self and society. Technology is about the ways things are done; the processes, tools and techniques that alter human activity. ICT is about the new ways in which people can communicate, inquire, make decisions and solve problems. It is the processes, tools and techniques for: 1. gathering and identifying information 2. Classifying and organizing 3. Summarizing and synthesizing 4. Analyzing and evaluating 5. Speculating and predicting Enhancing and upgrading the quality of education and instruction is a vital concern, predominantly at the time of the spreading out and development of education. ICTs can improve the quality of education in a number of ways: By augmenting student enthusiasm and commitment, by making possible the acquirement of fundamental skills and by improving teacher training. ICTs are also tools which enable and bring about transformation which, when used properly, can encourage the shift an environment which is learner centered. ICTs which can be in the form of videos, television and also computer multimedia software,

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that merges sound, transcripts and multicolored moving imagery, can be made use of so as to make available stimulating, thought provoking and reliable content that will keep the student interested in the learning process. The radio on the other hand through its interactive programs utilizes songs, sound effects, adaptations, satirical comedies and supplementary collections of performances so as to induce the students to listen and get drawn in to the training that is being provided. The use of online pedagogy within universities and management institutes is increasing. The introduction of the Wi-Fi system too has led to the growth of hi-tech education system, where accessibility and accountability of subject matter is made readily available to the students. The students can now study and comprehend the related information at their own convenient time. (Swati Desai (2010)

LIMITATION OF THE ICT IN EDUCATION

ICT as a modern technology simplifies and facilitates human activities is not only advantageous in many respects, but also has many limitations. Limitations can be categorized as teacher related, student related, and technology related. Teacher's attitude towards use of these technologies is vital, many observations reveal that some teachers do not have clarity about how far technology can be beneficial for the facilitation and enhancement of learning due to lack of competency to handle, whereas some teachers may have positive attitudes to the technology. Teacher resistance and lack of enthusiasm to use ICT in education may also be another limitation (Bitsadze K, Chichua T, (2004). Unless teachers develop some basic skills and willingness to experiment with students, ICT use in education is in a disadvantage (Brosnan, 2001). Lack of infrastructure and equipment's are another problem for back warding Indian education system.

REVIEW OF LITERATURE

Sharma (2012) highlighted the initiatives of e-Governance and assured its impact on society across whole of the country. In his research paper, the author studied e-Governance projects in various states of India such as BHOOMI in Karnataka for computerization of land records, E-SEVA in Andhra Pradesh for e-payment of utility bills/taxes, FRIEND (Fast, Reliable, Instant, Efficient Network for Disbursement of Services) in Kerala for the payment of different utility bills, GYANDOOT in Madhya Pradesh for village communities, LOK MITRA in Rajasthan used as single window system, SAMPARK in Chandigarh providing electronic service. According to this study, the awareness of computer and use of internet is quite low in India. Hence, it is very difficult to implement e-Governance projects effectively.

Shiva Kumar, (1998) Correlates of Computer Attitude among Secondary School Students in Lagos State, Nigeria- The findings of this research has shown that effective management of socio-demographic factors [like gender and field of study], and personality variables could significantly predict how learners will relate to the computer, their persistence at studying computing and its allied courses as well as the development of interest in computer and computer related vocations.

Saxena et al., (2017) in their research paper, discussed the e-Governance projects implemented in Rajasthan for improving governance, employment opportunities and life style of citizens. The authors mentioned the e-Governance projects for Government to Government (G2G), Government to Business (G2B) and Government to Citizens (G2C) services implemented in the State under study. The authors concluded that the end-users of e-Governance projects are citizens, businessmen, employees and the government itself participates in service delivery system.

Warale and Diwakar (2011) suggested the solutions for removing shortcomings of the existing e-Governance systems and discussed the present status of e-Governance at the world level. USA and western countries are far more successful in e-Governance implementation. These countries have contributed towards the success of e-Governance projects in Bangladesh, South Africa, Namibia, etc.

OBJECTIVES OF THE STUDY
- Improvement in learning pace and achievements
- Increased acquisition of knowledge, skills by individuals required for better living and sustainable development

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- To know the importance of Information Technology in educational sector
- To know the impact of Information Technology on classroom teaching

NEED OF THE STUDY

Both education and learning is life time processes, they have no limit of when to start and stop. Learning helps in gaining new experiences in our everyday life, thus changing our way of thinking, living and judging human behavior. Through education students are getting various types of information. Information technology has the ability of speeding up information delivery so this ability can be used in improving teaching-learning environment. Both teachers and students are using various technologies to achieve specific academic goals. Information technologies have reduced the cost of education. For example the increased use of internet broadband makes it easy for students to access academic information on time.

CONCLUSION

Information communication technologies are influencing all aspects of life, in which the impacts of ICT is significant is education. ICTs help expand access to education, motivate to learn, facilitates the acquisition of basic skills, and can transform the learning environment thus help improving the quality of education. ICT has tremendous potential for education. ICT enables a teacher to reach out widely efficiently and effectively. It helps teachers and institutions to be more modern and dynamic. Eventually, the use of ICT will enhance the learning experiences of students. It also helps for building a successful career, in a technology savvy world. (Namita Saxena 2017)

Conclusion In recent years there have been made important steps in installing new technical methods in countries educational and scientific sector. A few years ago it was impossible to get education at the prominent universities of foreign countries, without going abroad. Nowadays it's easier via online regime. Modern informational technologies have an influence on the process of getting education, on informational sources of interaction on which are based the process of teaching and studying and these make changes in the duration, places and speed of studying. Educational information is available for the whole population; this is the particularity of modern informational technologies. The distant educational teaching technologies are based on their use, what is the most rapidly developing course all over the world. The short description of the condition of modern distant teaching system leads us to the conclusion that this system evidently is prosperous for the combating of problems which stand before the modern society. Using of internet showed humanity unprecedented possibilities. It was transferred huge place of free in words and created so called the masses of "Virtual" - "Simple, Ordinary" man or group of men. The national objectives of general education requirements for the implementation of special importance include the use of information technologies in studying and learning. Information technology offers new opportunities for the education system. Using computers and the Internet makes the learning process more interesting and diverse and leads to increase in cognitive activity. Many different kinds of internet resources enrich the teacher and student's activities. New subjects programs will facilitate communication and information processing skills development. In regard to this, all the subject teachers' training will be held in accordance with this. When teachers use information resources they should consider how to use resources efficiently in order to help the learning process, how teachers enrich educational resources for collaboration and sharing of experience, how teachers check efficiency of resources. When teachers use information technology resources they should only use those materials which ¬correspond directly to the lesson topic, know about possible troubles and where to make comments and notes. Select the location that is acceptable for the class' area of vision so that activities can be planned that it will evoke possible discussions about the obtained information that is specific to the task. Students can express their opinions freely, ask questions and make assessments of their work and of others. Determining the need of information is guidelines for filling in these materials needed to write the story; to draw up a thesis, etc. Observation has showed that the use of information technology changes the attitude to learning. The process is deemed more interesting and successful.

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