ROLE OF ICT FOR QUALITY IMPROVEMENTS IN TEACHERS AND EDUCATIONAL SYSTEM: A REVIEW

Dr. Ketki S. Misar

Department of CosmeticTechnology,

Kamla Nehru Mahavidyalaya,

Nagpur

Abstract : Information and Communication Technologies (ICTs) is progressively becoming essential part of the educational system. It has changed many features of our lifestyle. These changes are the reasons for educational institutions, administrators, management bodies, teachers to rethink their roles, teaching and vision for the future. ICT has opened new door of challenges for quality education [1].Also the pandemic situation of COVID-19 has caused the confinement of people and with it, the closure of centers and the transfer of face-to-face education to online education. Faced with these facts, teachers have had to adapt to new methodological approaches for teaching by using ICT [2].The requirement of the hour is to innovate and execute alternative educational system and assessment strategies by effectively using ICT. This review article is a humble attempt to discuss the significance of Information Communication Technology used in education system, for the betterment of teaching and learning. It highlights the impacts, functions and benefits of ICT in education system.

Keywords: ICT, education system, teachers, role of ICT, quality

----

Introduction :

The utilization of ICT has provided a notable contribution in bringing about improvements in the quality of teachers, students and finally in education system. In educational institutions at every levels, it is mandatory for staff members to implement variety of tasks and functions. While performing various tasks and functions, the individuals are needed to make use of ICT. By smartly using ICT, individuals are capable to generate awareness and strengthen their knowledge in terms of various aspects. For enrichment of the technical teaching-learning methods and instructional strategies, the educators make use of ICT. On the other hand, when students need to work on assignments and projects, then they make use of ICT to carry out their task in a well-organized manner and in accordance to the desired expectations [3].

Provisions such as lockdown and social distancing for the prevention of COVID-19 haveled to closures of schools, training institutes and higher education facilities inmost countries. There is a sudden and drastic shift in the way educators deliver qualityeducation through various online platforms. The online learning, distance andcontinuing education have become a panacea for this unprecedented globalpandemic, despite the variety of challenges posed to both educators and learners.Transitioning from traditional offline learning to online

IMPACT FACTOR
5.473 (SJIF)

UPA NATIONAL E-JOURNAL
Interdisciplinary Peer-Reviewed Indexed E-Journal

ISSN
2455-4375

learning can be anentirely different experience for the learners and the educators, which they mustadapt to with little or no other alternatives available. The education system and theeducators are adopting "Education in Emergency" through differentE-platforms and are compelled to adopt a system that they are not prepared for [4]. ICT-E-learning tools have played a pivotal role during this tough situation, helpingschools and universities for facilitating studies during the closure of universitiesand schools [5].

Importance of ICT in learning process:

ICT has uniquesignificancein the system of education and in the execution of social transactions. The use of ICT is greatly responsible for bringing about positive improvements in the ways of working of teachers and other members of the educational organizations. The extensive use of ICT within the teaching-learning processes and instructional strategies has a positive effect upon the system of education. In other words, the individuals of the educational institutions are capable to perform their tasks in a well-ordered and manageable manner and feel pleasurable and contented. The use of ICT promotesadvantageous learning environment. In the favourable learning environment, the students and teachers are able to contribute a satisfactory participation and work in collaboration and integration with each other in the achievement of academic goals. The use of multimedia makes the learning environment within the classroom lively, friendly and suitable to the needs and requirements of the students.

It is vital for the teachers to prepare themselves well, before they come to class, whether it is online or offline, to deliver their lectures. The use of ICT encourages independent learning and also takes into consideration, alternative theories of learning and practicing. The traditionaleducation process puts emphasis on planning on the part of the teachers and lead the students through a series of structural sequences to achieve the desired end results. With the help of technologies, transformations are facilitated from teacher centered to student centered instruction[6]. Technology brings an important contribution in supporting and augmenting cross-disciplinary research and teaching programs. Furthermore, collaboration and integration is also promoted between research and development units within industries and higher educational institutions [7]. By implementing the role of ICT, educational organizations are able to set up communication terms and generate knowledge and information in terms of approaches and strategies that are put into operation in various educational institutions.

Functions and advantages of ICT tools in the field of education system:

ICTs areassuredly powerful tool for extending and enhancing educational opportunities and qualities. Being boon in pandemic situation for education system, it has proven to be the most beneficial tool for online teaching learning process. It is playing a crucial role in education system in the current lockdown scenario. If the teachers get acquainted with the maximum and updated knowledge of recent online teaching-learning tools, the quality of teachers and thereby the education system can surely attain new heights of success.

The main roles of ICT in education are[8,9] **:**

- Development of various educational services and medium
- To encourage equal opportunities to obtain education and information
- To develop a system of gathering and distributing educational information
- Promotion of technologicalliteracy and supporting distance education system
- To facilitate sharing experience and information with others
- To facilitate improvements in innovative teaching patterns and making classroom teaching interesting
- Acts as an assisting tool for teaching-learning environment
- ICT helps teachers to inspire students and create interest in learning
- ICT is depository of educational institution because all educational information can safely be storedby using ICT
- ICT helps for the enhancement of communication skills for teachers,so ICT is link between teachers and students and can play a key role in student evaluation

Opportunities for quality enhancement for teaching and learning by use of ICT :

Although there have been overwhelming challenges for educators, schools, institutes and the government regarding online education and use of ICT from a different angle, there are several opportunities created by the COVID-19 pandemic for the improvised and the distant plans of implementing online learning system. It has forged a strong connection between teachers and parents than ever before by the extensive use of ICT. The home schooling requires parents to support the students' learning academically and economically. Children with disabilities requires special support during this Pandemic emergency. By the virtue of ICT, the use of online platforms such as Google Classroom, Zoom, virtual learning environment, social media and various group forums like Telegram, Messenger, WhatsApp etc. are analysed and tried for teaching and learning for the first time ever to resume education. This can be explored further, even after face-to-face teaching resumes, and these platforms can provide additional resources and coaching to the teachers and learners and can definitely prove beneficial for improving the quality of teachers. Teachers are forced to innovate creative initiatives that help to overcome the obstruction of virtual teaching. Teachers are vigorously collaborating with one another at a possible level to improve online coaching methods. There are incomparable probabilities for cooperation, creative solutions and willingness to learn from others and make efforts for new tools as educators, parents and students to share similar experiences [10]. Many educational organizations are offering their mechanisms and solutions for free to help and support teaching and learning in a more interactive and engaging environment. Online learning has provided the chance to teach and learn in innovative ways unlike the teaching and learning experiences in the normal classroom pattern.

Conclusion:

Information communication technologies are influencing all aspects of life, in which the impacts of ICT are noteworthy in educational field. The requirement of the hour is to innovate and execute alternative educational system and assessment strategies by effectively using ICT.The pandemic situation due to COVID-19 is responsible for devastating consequences in society and the education system is also equally affected. A paradigm shift is going on in the educational system that goes beyond the merely methodological aspects. The fact is, different educational administrations have had to carry out a transfer of the educational system from offline in-person teaching to online teaching at a speed of real urgency, and is bringing about the use of ICT to have gone from being one more methodological resource to a necessary solution so that the teaching and learning process is not interrupted, thus minimising the collapse of educational systems worldwide [11]. The teacher's role in the effective use of ICT tools in the teaching–learning process after the COVID-19 crisis is essential [12]. For this, teachers are required to be trained so that, it will lead to them assimilating the pedagogical uses of ICT. In this way, the generation of new learning styles would be facilitated and the quality of teachers can be improved.

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 teachers thereby improving education system. ICT has tremendous potential for education. ICT enables a teacher to reach out extensively, efficiently and effectively. It helps teachers and educational organizations to be more advanced and dynamic. Eventually, the use of ICT will intensify the learning experiences of students.

References:

- Saxena N., The Role and Impact of ICT in Improving The Quality of Education: An Overview, Int. J. of Engineering Sciences & Research Technology, March, 2017, pp. 501-503

- Díaz L E., Caminero G.F., Carmen-Maria Hernandez-Lloret C.M., Gonzalez H.G., Castillo J.L., Analyzing the Impact of COVID-19 on Education Professionals Toward a Paradigm Shift: ICT and Neuroeducation as a Binomial of Action, Sustainability 2020, 12, 5646; doi:10.3390/su121456462020

- Kapoor R., Use of ICT in Improving Quality of Education, https://www.researchgate.net/publication/333446961, 2019, pp. 1 -13

- Pokhrel S., Chhetri R., A Literature Review on Impact of COVID-19 Pandemic on Teaching and Learning, Higher Education for the Future, DOI: 10.1177/2347631120983481, 8(1), 2021, pp. 133–141

- Subedi, S., Nayaju, S., Subedi, S., Shah, S. K., & Shah, J. M., Impact of e-learning during COVID-19 pandemic among nursing students and teachers of Nepal. International Journal of Science and Healthcare Research, 5(3), 2020, 9

- Kaur, N. (2015). Using ICT in Empowering Teachers for Quality Education. International Journal of Scientific Research Engineering and Technology, Department

of Education, Guru Nanak Dev University, Amritsar. Retrieved May 28, 2019 from http://www.ijsret.org/pdf/EATHD-15007.pdf , pp. 1-5

- Pandya, P.J. (2016). Improving Quality of Higher Education in India. An Inter-Disciplinary National Peer and Double Reviewed e-Journal of Languages, Social Sciences and Commerce, 1, Retrieved May 28, 2019 from http://uancmahilacollege.org/papers/10.pdf pp. 52-56

- Desai S., Role of Information Communication Technologies in Education. Proceedings of the 4th National Conference; INDIA. Computing for Nation Development, 2010

- Bhattarjee B., Deb K., Role of ICT in 21st Century's Teacher Education. International Journal of Education and Information Studies. Vol 6, No. 1, 2016, pp.1-6

- Doucet, A., Netolicky, D., Timmers, K., &Tuscano, F. J., Thinking about pedagogy in an unfolding pandemic (An Independent Report on Approaches to Distance Learning during COVID-19 School Closure). Work of Education International and UNESCO. https://issuu.com/educationinternational/docs/2020_research_covid-19_eng Guidance Note on Education Systems' Response to COVID19, 2020, March, Pp. 6.

- Naresh, R., Education after COVID-19 Crisis Based on ICT Tools, Purakala. UGC Care J. 2020, 31, pp. 464–468

- Santisi, G.; Magnano, P.; Platania, S.; Ramaci, T. Psychological Resources, Satisfaction, and Career Identity in the Work Transition: An Outlook on Sicilian College Students. Psychol. Res. Behav. Manag. 2018, 11, pp.187–195. [CrossRef] [PubMed]