

# **ICT Enabled Education - Roadmap to Future Generation**

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## **ABSTRACT**

*Information and Communication Technologies (ICTs) is a wider term for Information Technology (IT), it refers to all communication technologies, which includes the internet, cell phones, video-conferencing, wireless networks, middleware, computers, software, social networking, and many other media applications. It helps users to enable to access, transmit, store, manipulate and retrieve information in a digital form. In this research paper reasons why it is very important for future classroom teacher should adopt 21st century skills to their students are studied and how the continuous professional development is necessary to teachers as well as students and how the Information and Communication Technologies (ICTs) enabled education will be a roadmap to a future generation.*

*Keywords: Information and Communication Technologies, Education Institutes, Teachers.*

## **INTRODUCTION**

A person who called as a knowledge worker is the one who adds value to an organization by processing existing and latest information and they further create new information and knowledge that could be used to define and solve various problems. The future classroom is the going to be game for students and a game field for teachers. It inculcates the vision for learning, teaching and development with the use of Information, communications and Technology tools (ICT). Hence, in order to provide to the students the importance of 21st century skills such as social responsibility, communication abilities, critical thinking, digital competence, technical knowledge and collaboration. From the point of view of teacher's, it heavily demands understanding, collaborative, administrative knowledge, creative use of ICT tools, organizational competences, use of latest teaching scenarios, natural assessment methods. Further teacher should have attitude of "lead and teach by example". If we have to deliver effective and competent people to the society who will be the stakeholders in a world which seeks creativity, innovation so that our economic, scientific and social temper will be strong.

Information and Communication Technology (ICT) in education is the mode of education that use of information and communications technology to enhance, support, and optimise the delivery of information. Worldwide research has already shown that ICT can further lead to a better-quality student learning and improved teaching methods. A report made by the National Institute of Multimedia Education in Japan, further proved that a growth in the use of ICT in education with assimilating technology to the curriculum and syllabus has a noteworthy and optimistic impact on students' achievements. The results have showed that the students who are constantly exposed to technology via education has better knowledge, innovative capabilities, presentation skills, and they are ready to take more efforts into learning which they are implementing in their daily lives.

## **OBJECTIVES**

- To study the reasons why it is very important for future classroom teacher should adopt 21st century skills to their students.
- To study how the continuous professional development is necessary to teachers as well as students.
- To study how the Information and Communication Technologies (ICTs) enabled education will be a roadmap to a future generation.

## LITERATURE REVIEW

- Dimitrios Charalambidis (2017), suggested that it is important to educate our child to learn to participate and thrive in global economy, it is necessary for a child to provide 21<sup>st</sup> century education.
- Wael S.Basri (2018) researched that it is necessary to involve all of the functionaries in ICT to operate, if ICT has to operate smoother.
- Ellis and Loveless (2013) researched that pedagogy used in higher education can never be isolated from innovation, teaching process and from the academic achievement, this study also reveals that prospective role of ICT in higher education cannot be ignored.
- Márcia and Renata, road has proved that in order to be a valuable for supper and technological propection to planning decision, scientific knowledge should be kept within the limits and viable panorama should be proposed within the considered time horizon.
- James Francis (2017), staff should continue to innovate and technology intervention should be pushed forward. New curriculum development and planning of lessons should be framed considering technology as a base.
- Avishkar Kamble (2013), digitalization of the classrooms totally depends on institution decisions. It is the need of the hour that every conventional classroom should be converted into digital classroom which will be only solution to into effect.

## NEW TRENDS IN EDUCATION

- In order to increase the reach of education and institution to a large number of students, it is very important to introduce ICT into the education. Mobile learning application is a form of E -learning is an increasing trend where the education has acquired mobility and has also outgrown the physical constraints of the classrooms. Learning digital responsibility, having computational thinking, collaboration of classrooms, innovating of different pedagogy, life skills lessons & preparation of workforce, student learning qualitative process, connection with families and guardians, schools, colleges institution and emerging technologies.
- Now students can also access information wherever and whenever they want. Further, institutions which provides such advanced technological terrains is rising in number day by day. Through ICT education teachers can teacher the students life learning lessons like digital literacy, global awareness, digital literacy, risk-taking, creativity, teamwork, curiosity to learn new concepts. Smarts boards without which taking lectures are difficult.

## VARIOUS TECHNOLOGIES USED IN ICT INCLUDES

Handheld computers, projector devices, tablet computers, audio players. Use of course materials through remote devices, online digital repositories for lectures, digital library and course materials. Cloud-based online based academic management systems, flipped classroom, digital cameras and camcorders, software learning tools, networking system, satellite system. Further, there is also the increasing number of Massive Open Online Courses (MOOCs) which tells us that there is a huge demand for off-the-classroom learning facilities. The future of our institutions will depend on whether or not they can satisfy those needs.

## IMPORTANCE OF ICT IN EDUCATION

According to the policy-makers ICT in education is very important and it can assist students to compete at the global market who will be a talented, intellectual and skilled workforce.

- Administration of the institution should be improved in order to develop efficiency and quality of service delivery.
- Training to faculties is very essential.
- Providing new skills sets and to improve learning experience.
- Reaching more and more students through Massive Open Online Courses (MOOCs).

- Saving time and minimising cost which is associated with automating regular day-to-day tasks and information delivery.

## **IMPACT OF USING OF ICT IN TEACHING LEARNING**

- Students should be able to understand the concepts more easily.
- Better access to information.
- Easy availability for resources and shared working space.
- Promote new discoveries and collaborative learning.
- Better concept is understood in less time.
- Better utilisation of time for teachers.

## **ICT ENABLED EDUCATION WILL BE VERY USEFUL IN OBTAINING GOOD RATING FROM NAAC AND NBA ACCREDITATIONS**

NAAC and NBA during their accreditations have proved that quality assurance program is the basic requirement. Thus, in order to obtain good rating high quality education to students and research among teachers are very much important. Thus, way to improve the quality of education is to make use of smart and efficient technology in an education institution which will open up more avenues and opportunities for the teachers and students as well.

## **CONCLUSION**

ICT in education will help teachers to smoothly deliver the lectures. It will help students to quickly understand the concepts. It will also save a lot of time of teachers and students and students can later concentrate on practical oriented studies. Thus, ICT is very easy to manage and easy to handle. Through ICT it will take our institutions towards growth and giving quality and technology oriented students who are job ready to the industry. Adoption and usage of ICT in education has a positive impact in teaching learning process. It is possible to deliver quality lectures to the students. Due to flexibility learners are now able to access educational information regardless to geographical barriers and time. As the concepts are properly understood to the students improves the performance standards of students. Due to availability of best course material online and via during lectures students do not have to go for extra coaching classes which helps in saving in monetary terms. Thus, due to ICT, should will be having good academic knowledge and technical expertise and students are job ready. As the quality of students performance is growing day by day in the long run for the country like India it will help to boost the Indian economy

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